TY ᴏꜰ CALCUTTA

THE

ALENDAR

ꜰOR THE YEAR

1919.

PAᵡ

PAᵡERS.

ALCUTTᴀ.

the Calcutta University.

1920.

CONTENTS.

EXAMINATION PAPERS.

Matriculation Examination.

1918.

ENGLISH.

(Including the Alternative Paper).

Paper-setters—
{ The Hon'ble Justice Sir Asutosh Muker-
jee, Kt., C.S.I., M.A., D.L.
T. S. Sterling, Esq., M.A.
J. N. Das Gupta, Esq., B.A. (*Oxon*).

First Paper.—Part (A).

Head Examiner—J. N. Das Gupta, Esq., B.A. (*Oxon*),
Bar.-at-Law.

Examiners—
{ Babu Chandicharan Mitra, M.A.
Babu Satiskumar Banerjee, M.A.
Babu Priyanath Nag, M.A.
Babu Benimadhab Das, M.A.
Babu Saratchandra Brahmachari, M.A.,
B.T.
Maulavi Muhammad Yusoof, M.A.
Babu Jiteschandra Guha, M.A.
Babu Sailendranath Sarkar, M.A.
Babu Banbilas Ray, M.A., B.T.
Babu Bamacharan Banerjee, M.A.
Babu Nalininath Ghose, M.A.
Babu Praphullakumar Das, M.A.
Babu Panchanan Singh, M.A.
Babu Batuknath Bhattacharyya, M.A.
Babu Sukharanjan Ray, M.A.
Babu Saratchandra Gupta, M.A.
Babu Harendrachandra Chakrabarti, M.A.
Babu Hrishikes Bhattacharyya, M.A.

TRANSLATION FROM BENGALI INTO ENGLISH.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Translate into English *any two* of the following three passages :—

(a) তাঁহার পিতা সমৃদ্ধি-সম্পন্ন ছিলেন না ; এ নিমিত্ত তাঁহাকে উচিতমত শিক্ষাদান করিতে পারেন নাই । কিন্তু তিনি স্বভাবতঃ সুবোধ ও সুশীল ছিলেন ; অতএব তিনি কেবল আপন যত্নে ও পরিশ্রমে সুচারুরূপে শিক্ষিত হইয়া, খ্যাতি ও প্রতিপত্তি লাভ করিয়াছিলেন । তিনি আপনার প্রথম বয়সের বৃত্তান্ত এইরূপ লিখিয়াছেন, —"আমি দ্বাদশবর্ষ বয়ঃক্রমের সময়ে পাঠশালা পরিত্যাগ করিয়া, পিতার কৃষি-কার্য্য-বিষয়ে সহায়তা করিতে আরম্ভ করিলাম । তাঁহার যে আলুর চাষ ছিল, তাহাতেই আমি পরিশ্রম করিতে প্রবৃত্ত হইলাম । ঐ আলু আবশ্যকমত বর্দ্ধিত হইলে, আমি মস্তকে করিয়া, বিক্রয়ার্থ বিক্রয়স্থানে আনয়ন করিতাম । পিতা প্রায় আমার উপর বিক্রয়ের ভারার্পণ করিতেন, ইহাতে আমার দ্বারা তাঁহার অনেক উপকার হইয়াছিল । এইরূপ পরিশ্রম করিয়া, যৎকিঞ্চিৎ কাল অবশিষ্ট থাকিত, তাহা পুস্তক পাঠ করিয়া যাপন করিতাম । ইহাতে আমার শরীর সুস্থ ও বলিষ্ঠ হইল এবং অন্তঃকরণ সুখী ও জ্ঞানসম্পন্ন হইতে লাগিল । পরিশ্রমের পর যেরূপ সুনিদ্রা উপস্থিত হইত, তাহা আমার অদ্যাপি হৃদয়ঙ্গম রহিয়াছে । যদি কেহ আমাকে জিজ্ঞাসা করে, কোন্ ব্যক্তি সর্ব্বাপেক্ষা সুখী ? আমার উত্তর এই,—'যাহারা আপন হস্তে, মৃত্তিকা-কর্ষণ করে, ভূমণ্ডলে তাহারাই সুখী' ।" 35

(b) ১৭৫৫ খ্রীষ্টাব্দে ডেভিড হেয়ারের জন্ম হয় । তাঁহার পিতা ঘড়ির কার্য্য করিতেন । হেয়ারও বড় হইয়া ঐ কার্য্য শিখিয়া ব্যবসায় করিবার অভিপ্রায়ে কলিকাতায় আসিলেন । তখন তাঁহার বয়ঃক্রম 35

২৫ বৎসর মাত্র। অল্প দিনেই তাঁহার অবস্থার উন্নতি হইল। কিন্তু অর্থোপার্জ্জন করিয়া তাঁহার মনের তৃপ্তি হইল না; সেই জন্য নিজের ব্যবসায় অপরকে দিয়া, তাঁহার মনোমত কার্য্যে তিনি জীবন উৎসর্গ করিলেন। তৎকালে এদেশে কি বাঙ্গালা, কি ইংরাজি কোন শিক্ষারই বিস্তার ছিল না। দেশে ভাল বিদ্যালয় বা পাঠশালারও প্রতিষ্ঠা হয় নাই। ডেভিড্ হেয়ার বঙ্গের এই অভাবমোচনে ব্রতী হইলেন। বিদ্যা অমূল্য ধন। সেই ধন দান করিয়া হেয়ার মানব-সমাজে অমর হইয়াছেন। তৎকালে এদেশে বালক পাঠ্য ভাল পুস্তক ছিল না। হেয়ারের চেষ্টায় সুপাঠ্য গ্রন্থ প্রচারের নিমিত্ত স্কুলবুক সোসাইটী নামক একটী সমিতি গঠিত হয়। হেয়ার কলিকাতার নানাস্থানে বিদ্যালয় স্থাপন করিয়াছিলেন। পঁচিশ বৎসরকাল হেয়ার বালক-দিগের শিক্ষকতাকার্য্যে নিযুক্ত ছিলেন। ছাত্রেরা সকলেই তাঁহাকে পিতার ন্যায় ভক্তি করিত। তিনি শুধু শিক্ষাদান করিয়াই ক্ষান্ত থাকিতেন না। ছাত্রদিগের পীড়া হইলে অনেক সময় তাহাদের চিকিৎসার ভার তাঁহাকে লইতে হইত।

(৫) আপনি বাহুবলে অন্য রাজ্য নিজ আয়ত্ত করিয়া রাজা ৩৫ হইয়াছেন। প্রজারঞ্জন করাই রাজার ধর্ম্ম ও প্রধান কর্ত্তব্যকর্ম্ম। যে রাজা প্রকৃতিপুঞ্জের সুখসমৃদ্ধি বর্দ্ধনে অসমর্থ, সে রাজা নহে। সম্রাট্, আপনি কোন্ ইচ্ছার বশবর্ত্তী হইয়া রাজ্যের বিস্তার সাধন করিতেছেন? আপনি কি মনে করিয়াছেন, এই বিশাল রাজ্য সুশৃঙ্খলতার সহিত শাসন করিবেন? আপনার সুবিস্তৃত রাজ্যে কি সুখ ও শান্তি বিরাজ করিবে? অন্তঃকরণে যদি এরূপ বাসনা স্থান দিয়া থাকেন, তাহা ভ্রম। যেরূপ আপনার রাজ্য বৃদ্ধিপ্রাপ্ত হইয়াছে, এতাদৃশ সুবিস্তীর্ণ রাজ্যের প্রতিপালন করা সর্ব্বশক্তিমান্ পরমেশ্বর ব্যতিরেকে মানবের অসাধ্য। আবার ইহাও বলি, এই বিশাল রাজ্যের সুশাসন করা যে আপনার সাধ্যাতীত, তাহা আপনি অনুভব করিতে না পারেন, তাহা নহে। আর সুশাসন জন্যই যে রাজ্যবৃদ্ধি করি-তেছেন তাহাও অভিপ্রায় নহে। তবে ইহার মূলীভূত কারণ কি? কেবল দুর্দ্দমনীয় লিপ্সাই ইহার একমাত্র কারণ।

FIRST PAPER.—PART (A).

TRANSLATION FROM HINDI INTO ENGLISH.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Translate *any two* of the fo'lowing passages into English :—

(a) व्यय की ओर बिना सावधानी रखे अधिक धन आने पर भी   35
किसी का अभाव दूर नहीं हो सकता । प्रायः छोटी अवस्था में
अधिक व्यय करना अच्छा मालूम पड़ता है । कोंकि धन कमाने में
कितने कष्ट होते हैं इस बात को बच्चे ठीक ठीक नहीं जान सकते
और धन न रहने के कारण कितने कष्ट होते हैं यह बात भी उन
लोगों को विदित नहीं होती । प्रायः लड़के समझा करते है कि
किसी वस्तु की आवश्यकता होने पर पितामाता या और बड़े लोग
उसको पूरा करेंहींगे । परन्तु धन कमाने के लिये कौन कौन से कठिन
परिश्रम उठाने पड़ते है इस बात पर लड़के ध्यान नहीं देते । परन्तु
यह है अनुचित । लड़कों को समझना चाहिए कि दूसरे के कमाये
हुए धन को व्यर्थ व्यय करने का उन्हें अधिकार नहीं है । परन्तु
देखते है, लड़के अनेक प्रकार से धन को व्यर्थ व्यय करते है ।
अनेक प्रकार के खेल तमाशों में वे बहुत धन खर्च कर दिया करते
है और अच्छी अच्छी वस्तुओं को भी नष्ट भ्रष्ट करके वे बहुतसा धन
नष्ट करते हैं ।

(b) आजकल जापान में जितना ज़ोर शिक्षा पर है उतना   35
किसी और पर नहीं । उन्हें यह निश्चय हो गया है कि बिना विद्या
प्राप्त किये किसी जाति की उन्नति नहीं हो सकती । विद्या बिना
उन्नति की चेष्टा करना बालू पर मह्ल बनाना है । इस देश में शिक्षा
प्रणाली अमेरिका के ढंग पर है । वर्तमान में कोई ऐसा वर्ष नहीं
जाता जिसमें कुछ न कुछ नया सुधार न होता हो । स्कूल में लड़कों
को सदाचरण का पाठ दिया जाता है और उनकी शारीरिक वृद्धि
पर भी ध्यान रखा जाता है । कारण यह है कि जब तक मनुष्य के
तन और मन दोनो अच्छे प्रकार उन्नत न हों तब तक उसकी यथार्थ

उन्नति नहीं है । सब स्कूलों में सदाचरण, व्यायाम, पढ़ना और लिखना सिखाया जाता है । मेहनत मजदूरी करनेवालों के लिये उनकी आवश्यकता के अनुसार शिक्षा का प्रबन्ध है । स्त्री शिक्षा के लिये सन १८७१ ईस्वी में इस प्रकार राज आज्ञा निकली थी—
"उन माताओं का शिक्षित होना कितना जरूरी है जिनकी सन्तान पर देशोन्नति निर्भर है और जिनकी शिक्षा के लिये इतनी चेष्टा हो रही है । यह बात माताओं के ही हाथ में है कि बच्चों के हृदयों में विद्या का पूर्ण अनुराग उत्पन्न कर दें" ।

(c) जिस समय तीर्थरामजी एन्ट्रेन्स पास करके पंजाब की 35 राजधानी लाहौर में पहुंचे थे उस समय लाहौर की आज कल की सी हालत नहीं थी । आज कल लाहौर में जो पांच छः कौलेज दिखलाई पड़ते हैं वे उस समय नहीं थे । उस समय दयानन्द एंग्लो वेदिक कौलेज स्थापित तो हो नुका था तथापि आज कल की भांति विख्यात नहीं हुआ था । तीर्थरामजी क्रिश्चियन कौलेज में पढ़ने लगे । कौलेज में पढ़ते समय जैसे अनेक विद्यार्थी नित्य नये फैशन के शिकार बन जाते हैं यह बात तीर्थरामजी में नहीं थी । वे बहुतही सादे लिबास में रहते थे । उनकी बोलचाल बहुत सीधी सादी थी । क्रिश्चियन कौलेज से उन्होंने बी० ए० की परीक्षा उत्तीर्ण की थी । इस परीक्षा में वे पंजाब विश्वविद्यालय में प्रथम रहे थे जिस से उन्हें ६० रूपये मासिक छात्रवृत्ति मिलती थी । इसमें से वे अपना बहुत कम खर्च करते थे । बाकी रुपया अपने घर भेज देते थे अथवा अपने गुरुजी की आवश्यकताओं के दूर करने में लगाते थे । तीर्थरामजी की गणित में विशेष अनुराग था । गवर्नमेंट कौलेज में दो वर्ष पढ़कर एम० ए० भी पास कर लिया ।

First Paper.—Part (A).

TRANSLATION FROM URDU INTO ENGLISH.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Translate into English *any two* of the following passages :—

<div dir="rtl">

(a) ایک شاعر ایک دولتمند کے پاس گیا اور اس کي بہت
تعریفیں کیں ۔ اس امیر آدمي نے خوش ہو کر کہا کہ اس
وقت میرے پاس روپے تو نہیں ہیں ۔ ہاں غلّہ بہت کچھہ
ہے اگر تم کل آو تو تمہیں کچھہ غلہ دونگا ۔ شاعر گھر چلا گیا
اور دوسرے روز صبح سویرے اس مالدار کے گھر آ موجود ہوا ۔
مالدار نے پوچھا کیوں آئے ۔ اس نے جواب دیا آپ نے کچھہ
غلہ دینے کا وعدہ کیا تھا اسي غرض سے میں اس وقت آیا
ہوں ۔ دولتمند نے جواب دیا تم تو کانمہ کے اُلّو ہو ۔ تم نے
مجھے باتوں سے خوش کیا تھا میں نے بھي تمہیں باتوں سے
خوش کر دیا ۔ اب غلہ میں تمہیں کیوں دینے لگا ۔ شاعر
اپنا سا منہہ لیکر چلا گیا ٭

</div>

<div dir="rtl">

(b) ایک بخیل نے اپنے ایک دوست سے کہا میرے پاس
ہزار روپے ہیں جنہیں میں شہر کے باہر دفن کر دینا چاہتا
ہوں اور یہہ بھید تمہارے سوا میں کسي اور سے نہ کہونگا ۔
غرض وہ دونو شہر کے باہر گئے اور ان زریپوں کو ایک درخت
کے نیچے گاڑ دیا ۔ کچھہ دنوں بعد وہ بخیل تنہا اس درخت
کے پاس گیا مگر نقد کا اسے کوئي پتا نہ ملا ۔ اس نے اپنے
جی میں کہا اس دوست کے سوا اور کسي نے نہیں لیا

</div>

لیکن اگر میں اس سے پوچھونگا تو وہ ھرگز اقرار نہ کریگا ۔ اس
لئے وہ اس دوست کے گھر گیا اور بولا بھت سے اور روپے میرے
ھاتھہ لگے ھیں ۔ اُنھیں بھی اسي جگہ دفن کر دینا چاھتا
ھوں ۔ اگر تم کل آو تو ھم دونوں وھاں ساتھہ جائینگے ۔ اتنی
بڑی رقم کا لالچ کرکے دوستہ پھلے روپے اس جگہ پھر گاڑ آیا ۔
بخیل دوسرے دن جو وھاں تڑھا گیا تو اس کو اس کے روپے
ملگئے ۔ وہ اپنی تدبیر پر ناز کونے لگا اور اس کے بعد پھر کبھی
کسي دوست پر بھروسا نہ کیا *

(e)   ایک شخص کے مکان سے روپوں سے روپوں کا ایک تھیلا چوري کیا ۔   35
مالک نے شھر کے قاضي صاحب کو اس بات کي اطلاع دي ۔
قاضي صاحب نے۔ فوراً مکان کے سارے رھنے والوں کو اپنے
روبرو بلایا ۔ ھرچند تحقیقات کي مگر چور کا پتا نہ لگا ۔ آخر
ان لوگوں سے کھا میں تم میں سے ھر ایک کو ایک ایک
ھاتھہ لمبي چھڑي دیتا ھوں جو شخص چور ھے اس کي
لکڑي اوزوں کي لکڑیوں سے ایک۔انگل بڑي ھو جائیگي ۔
یھہ کھکر قاضي صاحب نے ھر ایک کو ایک ایک چھڑي
دیدي اور انھیں رخصت کر دیا ۔ رات کے وقت چور نے ڈر کر
اپنے دل میں کھا اگر میں اپني چھڑي میں سے ایک انگل
کاٹ ڈالوں تو صبح کو اوروں کي چھڑیوں کے برابر ھوگي ۔یھہ
خیال کرکے اس نے اپني چھڑي میں سے ایک انگل کاٹ
ڈالا ۔ دوسرے دن اوروں کے ساتھہ قاضي کے سامنے حاضر ھوا ۔
قاضي نے چھڑیوں کا ملاحظہ کرکے اپني حکمت سے چور کا
پتا لگا لیا *

FIRST PAPER.—PART (A).

TRANSLATION FROM ASSAMESE INTO ENGLISH.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into English :—

(a) মানুহৰ নিচিনাকৈ গছ-গছনিবোৰো প্ৰাণ আছে। আমাৰ দৰে 35
সিহঁতেও সুখ দুখ অনুভৱ কৰিব পাৰে, সেইটো কথা তোমালোকে
জানানে ? কেৱল সেয়ে নহয় আমাৰ দৰে সিহঁতৰ টোপনিও আছে।
তোমালোকে ভাবিব পাৰা যে গছ নিতৌ একে ঠাইতে থিয় হৈ থাকে।
ইফালে সিফালে লৰচৰ কৰিব নোৱাৰে সিহঁতৰ নো আকৌ কিহৰ
টোপনি ? বিজ্ঞান শাস্ত্ৰৰ পণ্ডিত সকলে সিহঁতৰো টোপনি আছে বুলি
প্ৰমাণ কৰি দেখুৱাইছে। গছেও ৰাতি শোৱে ; আমিহে তাৰ গম
নেপাওঁ। কিছু মান গছৰ টোপনিৰ কথা সহজে বুজিব পাৰোঁ।
সন্ধ্যা লগা মাত্ৰেই সিহঁতৰ পাত বোৱ জাপ যায়। তাৰ পৰা সিহঁত
যে শোৱে তাক সহজে বুজিব পাৰি।

(b) মহেশ্বৰনামে এটি লৰা আছিল, তেওঁ চতুৰ্থ শ্ৰেণীতে পঢ়িছিল। 35
তেওঁ এদিন গধূলি নৈৰ কাষৰ বাটেৰে ফুৰিবলৈ যাওঁতে দেখা পালে,
এজোপা গছৰ তলত এটি মানুহ পৰি আছে। পানীৰ কাৰণে সি
ই কৰি মুখ মেলি আছে। মহেশ্বৰক দেখা পাই সি লাহে লাহে কলে
"পানী খাওঁ"। তেওঁ সেই মানুহটিক দেখি বৰ দুখ পালে। পাচে
কেনেকৈ পানী খুৱাব ভাবি চাই, নৈৰ পৰা বগা কাপোৰখন তিয়াই
পানী আনী গছৰ পাতত চেপি চেপি গোট খুৱাই নৰিয়াৰ মুখত দিলে।
তাৰ প্ৰায়চত পুনৰ বজাৰৰ ফালৈ গৈ এখন বেতৰ খাট আৰু
দুটা কুলি আনি নৰিয়া পৰা মানুহটোক তাতে শুৱাই আচ্পতালৈ
লৈ গল। তেওঁৰ পিতাকে "ৰাতি হল, মহেশ ঘৰ পোৱাহি নাই
কিয়" বুলি ভাবি থাকোঁতেই তেওঁ আহি পিতাকৰ আগত সকলো
কথা কলে। বাপেকেও মহেশক শলাগি আগৈলেকো এনে ভাল কাম
কৰিবলৈ উৎসাহ বঢ়াই দিলে।

(c) ৰামসিংহে কেউগাঁনে পৰাস্ত হৈ লাজ আৰু অপমানত অদম্য 35
জয় কৰাৰ আশা পৰিত্যাগ কৰি উটীয়াই গল। ৰামসিংহই আমাৰ
সৈন্যৰ সাহ-বল আৰু কাৰ্য্য কৌশল দেখি প্ৰশংসা কৰি গল, বোলে,
"প্ৰত্যেক অসমীয়া সেনাই নাও বাব পাৰে, কাঁড় মাৰিব পাৰে,

মাটি খানিব পাৰে, আক তোপ আক হিল মাৰিব পাৰে। এনেকুৱা
নিপুণ সেনা মই ভাৰতবৰ্ষৰ কোনো ঠাইত দেখা নাছিলোঁ।।" এই
যুদ্ধৰ পাচত অসমৰ সীমা মানাহাৰ মুথৈলেকে বহলাই বৰকুকনে চকি
আক ঘট পাতি তাত বহুত সেনা থৈ গুৱাহাটীলৈ উভটি আছিল।
১৫৯২ শক বা ১৬৭০ খ্ৰীষ্টাব্দত এই যুদ্ধ শেষ হয়।

FIRST PAPER.—PART (A).

TRANSLATION FROM GUJARATI INTO ENGLISH.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Translate *any two* of the following passages into English:—

(*a*) માણસો બધા ઉતાવળમાં આમતેમ દોડતા હતા.   35
પણ કોઈના મ્હોં ઉપર સહેજ પણ આનંદ નહોતો. રસ્તામાં
વસ્તિ છતાં પણ શહેર જાણે તજ્જયલું હોય તેવો આભાસ
થતો હતો. મને કાંઈ સુજ પડતી નહોતી અને મ્હારા મનના
ઉત્સાહ અને આનંદ પણ નવા માંડ્યા. એટલામાં મને
ખ્યાલ આવ્યો કે ઓટલાઓ ઉપર, રસ્તાઓમાં કે ચોગા-
નોમાં મ્હેં એક પણ બાળક જોયું નથી એટલુંજ નહીં પણ
અત્યાર સુધીમાં કોઈ સ્ત્રી પણ મ્હારા જોવામાં આવી
નહોતી. આ વિચારથી મ્હારા મનને જાણે આધાત થયો.
આ વાત મને ભ્રમ જેવીજ લાગી. હું એકદમ અટકી ગયો
અને જે જે જગ્યાએ થઈને આવ્યો હતો તે બધી જગ્યા
ઉપર જોએલા મનુષ્યો સંબંધી વિચાર કરવા મંડ્યો પણ
કોઈ ઠેકાણે સ્ત્રીના મ્હેરો જોયેલો યાદ આવ્યો નહીં. નિશાળે
જતી આનંદથી કુદતી કોઈ કન્યા પણ મ્હારા જોવામાં
આવી નહતી.

(b) જે દેશમાં સ્ત્રીઓની સ્થિતિ ખરાબ હોય તે દેશમાં 35 પ્રજાનું જીવન કોઇ રીતે સુધરી શકે તેમ નથી. સ્ત્રીઓ પુરૂષની સાથે જીવનનો ઓનો ઉંચકે છે અને તેમના આગળ વધવાના પ્રયત્નેમાં આશા અને દિલાસો એ બંન્ને જીરા પાડી મદદ કરે છે. માતાના ઓળામાં મળેલું જ્ઞાન એ સર્વથી વધારે ઉત્તમ જ્ઞાન છે અને જ્યાં સુધી ન્હાની ઉમરની, અજ્ઞાન, પડદામાં, બંધ રખાયલી, અને બધી રીતે પછાત પડેલી માતાઓ બાળકોને ઉછેરે છે ત્યાં સુધી તે બાળકોમાં કોઇ જાતનું દૈવત આવી શકેજ નહીં. અહ્‌પણા સમાજના કઠંગા નિયમો પ્રમાણે એક બાળક હજુ બાર માસનું થયું નહીં ત્યાં તેં બીજું બાળક જણવાનો વખત આવે છે અને પહેલા બાળકને આપવાને દૂધનું ટીપું પણ નહોય ત્યાં તો બીજા એ બાળકોનું પુરૂં કરવાના ઓજામાં સ્ત્રીઓ કચડાઇ જાય છે. સ્ત્રીઓના સંબંધમાં નીચેનું નયન યાદ રાખવા જેવું છે.

"કહે નેપોલીયન દેશને કરવા આબાદાન

સરળ રીત તો એજ છે કે. દો અબળાને ધ્યાન."

(c) સ્વાર્થિ જીવન ગાળનારાઓને હું યાદ આપું છું 35 કે બીજા માણસોની મદદ શિવાય તેમનાથી એક ઘડી પણ જીવી શકાય નહીં. તેમનો ખોરાક દૂરના ખેતરમાં કોઇની મહેનતથી ઉત્પન્ન થયો છે. તેમનાં પહેરવાનાં કપડાં, પગ ઉપરના બુટ વિગેરે પણ અન્ય મનુષ્યોના પરસેવાથી પેદા થયેલા છે. તેમનાં ન્હાપણપણથી અથાગ મહેનત લઇને માતાપિતાએ જ્યારે તેઓ અશક્ત હતા ત્યારે પાળી પોષી

તેમને મ્હોટા કર્યાં છે. જગતની જાણવા જેવી ભોગવવા
જેવી જે જે વસ્તુઓ છે તે સર્વ કોઇને કોઇ સાચવીને
તેમને માટે તૈયાર કરે છે. ખીજા મનુષ્યોના પ્રયાસથી થતો
લાભ એમને એમ પંચાવી પાડવાનો કોઇને હક નથી અને
જો એવી સ્વાર્થિ ઇચ્છાઓ કોઇના મનમાં ઉભી થાય તો
ઇશ્વરને ત્યાં તેમનો ન્યાય થયા વગર રહેશે નહીં. એથી ઉલટું
જો આપણે આપણા પોતાના કાર્યમાં દક્ષતા ખતાવીને સારો
દાખલો એસાડીએ તો ખીજાઓ પણ પોતાનું કાર્ય ઠીક કરતાં
શીખશે અને તેને લીધે આપણને તેઓની તરફથી ઉત્પન્ન
થતી વસ્તુઓ સારી જાતની અને સારા જથામાં મળશે.

Translate *any two* of the following three passages into English :—

(a) ब्रॉंक्षियाचा बादश्हा हुसरा जोसेप याला वंघांक्षर करून
ब्रापल्या राज्यांत हिंडक्ष्चाची मोठो दोष ब्रसे. ब्रश्रा रीतीनें ब्रनेक
ब्रनाय त्यानें दूर केले होते. एकदां तो ब्रसाच हिंडत ब्रसतां एके
ठिकाणीं त्याला एक इंद्वाद्वारा वर्षांचा मुलगा भौक्ष मागतांना
ब्राढळला. बादश्हाच्या वेग्रांत पूर्वीं एक मोटा श्रूर सरदार होता,
त्याला लढाईंत जखम लागून तो घरीं राहिल्यामुळें त्याला कांहीं
वार्षिक वेतन देण्याचा ठराव झाला होता. पुढें तो सरदार
वारल्यावर ब्रर्घांत नियमाप्रमाणें ह पेन्शन बंद करण्यांत ब्रालें,
त्यामुळें त्या सरदाराच्या बायक्षामुलांची मोठो ओढाताण होऊं
लागली. पुढें सरदाराची पत्नी ब्राजारी पडली. पझ श्रोषघ-

पाख्याला पंसे नसल्यामुळें तिचा ग्राज्ञार चटेना . धाकटीं दोन मुलें
तिच्या झुप्रूषेस बसत, ग्राणि योग्ला मुलगा निवोर्ंहासाठीं भीक
मागत फिरे . हो हकीगत ऐकून बादशहाला फार वाईट वाटलें .
ग्राणि त्या मुलाला त्याचा पत्ता विचारून ग्राणि बंरच द्रव्य देऊन तो
पुढें चालला .

(b) एका तव्यांत तीन मासे हांते . पहिला ग्रहाण्या हांता,   35
दुसगहो साधारण व्यवहार चतुर हांता . पण तिसरा मात्र मूर्ख हांता .
एका कोव्यानें हे मासे पाहिले, ग्राणि त्यांना धरण्यासाठीं तो
ग्रापलें जाळें ग्रागावयास घरीं गेला . ग्रातां ग्रापण या तव्यांत
रहाणें ठीक नाहीं, ग्रसा विचार करून ग्रहाणा मासा, त्या तव्यां-
तून एक प्रवाह निघून जवळच्या नदींस मिळत हांता त्या प्रवाहांत
शिरला . दुसरे मासे स्वस्थ बसले . इकडे कोव्यानें ग्रापलें जाळें
ग्राणुन तव्यांत टाकलें . तेव्हां ग्रापणहो इथें रहाणें धोक्याचें ग्राहे
ग्रसें जाणुन हुसरा मासा पाण्याच्या ग्रागईं प्रष्ठावर तरंगत त्या
प्रवाहांत शिरला . तो मेला ग्रसावा ग्रसें समजून कोव्यानें त्याच्या-
कडंहो दुर्लक्ष्य केलें . विचारा तिसरा मासा मात्र थोड्याच वेळांत
पकडून कोव्यानें खावयास नेला .

(c) मेरी लँब इचें नांव घेतलें कीं, तिचा भाऊ चार्लस लँब   35
याचो ग्राठवण हांते . एका प्रसिद्ध ग्रंथकर्त्यांनें म्हटलें ग्राहे कीं,
इतर कौण्याहो नात्यापेक्षां बंधुभगिनीचें नातें निर्हेतुक ग्राणि निर्मळ
ग्रानंद देणारें ग्राहें . या वचनाच्या समर्थनार्थ बरींच प्रसिद्ध
उदाहरणें काढून ग्राखविता येतील ; पण त्या सर्वांत चार्लस लँब
ग्राणि मेरी लँब यांचें उदाहरण ग्रत्यंत ग्रेष्ठ दर्ज्याचें हांईल . जेव्हां
कोणी बंधुभगिनी कांहीं ग्रज्ञात ग्रसामान्य ग्राकर्षणानें—प्रेमा-
कर्षणानें एकज ग्राकर्षिलीं जातात तेव्हां स्वाभाविकपणेंच बहींण
भावासाठीं ग्रापल्या वैयक्तिक सर्व सुखाचा व्यय करिते . त्याच्या
सुखावांचून तिला थ्येय रहात नाहीं, त्याच्या ग्रानंदावाचून तिला
ग्रानंद भासत नाहीं . युरोपींय वातावरणांत तर ग्रशीं उदाहरणें
ग्राठळून ग्रालीं ग्राहेत, कीं, ग्रशा बहिणी बंधुप्रेमांत ग्रंतराय
उपस्थित हांऊं नये म्हणून विवांहहो न करितां ग्राजन्म ब्रह्मचर्यानें
राहिल्या ग्राहेत .

FIRST PAPER.—PART (A).

TRANSLATION FROM MALAYĀLAM INTO ENGLISH.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Translate *any two* of the following passages into English :—

(*a*) സത്യവാൻ—" കണ്ടുവെന്നു എനിക്കു തോന്നു 35 ന്നതെല്ലാം കേവലം സ്വപ്നമൊ അല്ല വാസ്തവമൊ എന്നറിയാഞ്ഞു മനസ്സിനു വ്യഥമുണ്ടു."

സാവിത്രി ഇതു കേട്ടു, " സൂയ്യൻ അസ്തമിച്ചു വളഞ രെ നേരമായി. ദുഷ്ടമൃഗങ്ങൾ ഇര തേടിക്കൊണ്ടു ചുററിത്തിരിയുന്നു."

സത്യവാൻ, " കൂരിരുൾ എങ്ങും പരന്നു അരണ്യ- ത്തിൻെറ സ്വാഭാവികമായ ഭയങ്കരത വിഗുണീ- കരിച്ചിരിക്കുന്നു. മാഗ്ഗം തിരിച്ചറിവാൻ പ്രയാസമാ- യി വന്നിരിക്കയാൽ തിരിച്ചു പുറപ്പെട്ടു പോകയെ- ന്നതു ഇപ്പോൾ അസാദ്ധ്യം."

സാവിത്രി, " ഇന്നു പകൽ കാട്ടുതീയുണ്ടായതീനാൽ ആ മരം വെന്തു തീക്കെടാതെ നില്ക്കുന്നതും മന്ദവായ്യും വീശുമ്പോൾ തീ മിന്നുന്നതും കണ്ടു. ഞാൻ അവി- ടെ പോയി അല്പം തീക്കനൽ എടുത്തു കൊണ്ടു വന്ന ഈ വിറക കത്തിക്കാം. മനസ്സിനു യാതൊരു പീ- ഡയും ഉണ്ടായിരിക്കരുതു. നിങ്ങൾക്കു ഇനിയും നല്ല സുഖമായില്ലെന്ന കാണുന്നതിനാൽ യാത്ര ഈ

അസമയത്തു വേണ്ടെന്നു പെക്കയാക്കുന്ന ഉത്തമം.
രാത്രി ഇവിടെ കഴിച്ചു പ്രഭാതത്തിൽ നമുക്കു പുറ-
പ്പെട്ടു പോകാം."

സത്യവാൻ, "കഠിനമായ തലനോവു കേവലം
ശമിക്കയും കാലിനും കൈയ്ക്കും ശക്തി തിരികെ
ഉണ്ടായിരിക്കയും ചെയ്യുതിനാൽ നിൻെറ സഹാ-
യത്തോടു കൂടി അമ്മയച്ഛന്മാരെ ഉടനെ ചെന്നു
കാണ്മാൻ ആശ വരുന്നു."

(b) സിലോണിലെ വടക്കൻ പ്രദേശത്തുള്ളതും 35
ശൂന്യാവശിഷ്ടങ്ങളാലും മറ്റും ഇപ്പോഴും പലരുടെയും
ശ്രദ്ധയെ ആകഷിച്ചു കൊണ്ടിരിക്കുന്നതുമായ
"അനഭപൂരം" എന്ന സ്ഥലം ഒരു കാലത്തു
ബൃദ്ധമതക്കാരുടെ ഒരു പ്രധാന സ്ഥലമായിരുന്നു.
ഇവിടെ പഴയകാലത്തു പണി കഴിപ്പിച്ചിട്ടുള്ള പല
വലിയ കെട്ടിടങ്ങളുടെയും അവശിഷ്ടങ്ങൾ ഇ-
പ്പോഴും കാണാനുണ്ടു. ഇവയിൽ ഒട്ടും അപ്രധാന-
മല്ലാത്ത ഒന്നാണു വലിയ പിച്ചള കൊട്ടാരം.
പഴയ കാലത്തു ഈ വലിയ കെട്ടിടം സ്ഥാപിച്ചി-
രുന്ന തൂണുകൾ മാത്രമേ ഇപ്പോൾ ഇവിടെ നില്ക്കുള്ളൂ.
ഒറക്കല്ലുകളിന്മേൽ പിച്ചള പൊതിഞ്ഞതായ ആയി-
രത്തിയറുനൂറ തൂണുകൾ ഇപ്പോഴും യാതൊരു കുറ-
വും കൂടാതെ സ്ഥിതി ചെയ്യുന്നുണ്ടു. ഈ തൂണുക-
ളിന്മേൽ ഒൻപതു നിലകളുള്ള ഒരു കൊട്ടാരം ഉണ്ടാ-
യിരുന്നു. പകൽ സമയം നടക്കുന്നതിനോ മഴക്കുള്ള

രാത്രി ഉറങ്ങുന്നതിനൊ ആയി ഇതിന്ന ചുരുപാടും
ഒരു കോലായും ഉണ്ടായിരുന്നതായി പറയപ്പെടുന്നു.

(c) അറങ്ങുസിബിന്റെ സൈന്യം രൂപനഗര- 50
ത്തെ വളഞ്ഞിരിക്കയാണാല്ലൊ. ഇവർ ഇങ്ങിനെ
വളഞ്ഞു കിടന്നിട്ടു ഇപ്പോൾ ഏഴുമാസം കഴിഞ്ഞി-
രിക്കുന്നു. തന്റെ മിത്രങ്ങളായ ക്ഷത്രിയ രാജാക്ക-
ന്മാക്കു വിജയസിങ്ങു ഒരയച്ചിട്ടുള്ള ഏഴത്തിൻ പ്ര-
കാരം ആരും തന്റെ സഹായത്തിന്നായി ഇതു
വരെയും വന്നു ചേന്നിരുന്നില്ല. വിജയസിങ്ങി-
ന്റെ സൈന്യം യാതൊന്നുകൊണ്ടും ദഗ്ഗോത്സാഹ-
രാകാതെ കോട്ട കാത്തു രക്ഷിച്ചു കൊണ്ടിരുന്നു. ഇ-
ടക്കിടക്കു ഇവരും ശത്രുസൈന്യങ്ങളുമായി ചില പോ-
രാട്ടങ്ങളും ഉണ്ടാകാതിരുന്നിട്ടില്ല. ഇവയിലൊന്നിലും
ഇവർ ഒട്ടും പിട്ടുകൊടുത്തിട്ടില്ല. എങ്കിലും എത്രനാ-
ളാണ് ഇങ്ങിനെ കിടക്കുന്നത. അതിനാൽ ഭാവിയെ
പറ്റി ആക്കും ഒന്നും പറയാൻ നിവൃത്തിയില്ലായിരു-
ന്നു ഈ കാഴ്ചയെല്ലാം വിമലാ ദേവിയും ഓരൊ
പ്രയാസപ്പെട്ട ജോല്ലികളിൽ ഏപ്പെട്ടു കൊണ്ടിരുന്ന-
തിനാൽ നന്നാ ക്ഷീണിച്ചിരുന്നു

First Paper.—Part (A).

TRANSLATION FROM TELUGU INTO ENGLISH.

Translate into English *any two* of the following passages :—

(a) ప్రజాసౌఖ్యమే పరమే పరమోద్దేశముగా రాజ్యమును 35
పాలించిన లోకకళ్యాణలు ప్రక్రియలలో సక్బర్ అగ్రగణ్యుడనియే
చెప్పనలసియున్నది, ఆక్బర్ యొక్క రాజ్యతంత్రమును సవిస్తరముగా
వర్ణించుచు నాచిన మిత్రుండు, పద్వాం సుంఘను అగు అబుల్ ఫజల్
అనువాండొక గ్రంథము వ్రాసియుంచినాండు, ఆ గ్రంథమునకు ' ఐనే
అక్బరీ ' అని పేరు, అక్బరు యొక్క_ ధైశ్వర్యమును, ప్రజాప్రీతియు,
సాధుస్వభావమును, రాజకార్యకౌశలమును, ప్రమోజకత్వమును నా
గ్రంథము వలనటెవెలియును. ' లోకులయోగ్యచార్ల కృషహీనముల సంకు_
వించు వ్యవసాయము నఖివృద్ధిచేయుట, నైన్యమును నిరిన ఓ బ్యాంగిను_
ములను సుక్షస్థితియు గానించుట, లోకోపనోగిగములైన ఒగ్యములలం
జేసి జనులను ప్రేస్తుష్టాంచి పరగులం జేయుట, ఆదాయమును అక్కు_ంం
బతీది ఖర్చుడయు చేయుట, మనుకర, ప్రజలసౌఖ్యమును జైరాః
చేగాళల్పిన పనులని యంచు ఆలను నొప్ప గ నాటపమయము, ఈసంతలును
గుఆకక రాజ్యము నిపిన ల నైధిపశాతియగుననటుకు సందేహా
ములేదు ! ' అని యా గ్రంథాన్ని వ్రాయంబడనది, అక్బరు చరిత్రయం
తయు యావాక్యసులకు లక్ష్మీభూవిము, ఈటిని రాజ్యములో భూపతిన
న్న మగుటీంచి చేయుంబడిన నిబంధనల పిషయ మైయుండు వ్రాయంట
డను, పన్ను ఎకురమింద పిశేషముగాంబడి యొకరివింంంం దఖ్ఖ_వ
పడక యందితీక సమాసముగా సంకనునట్లు చేయుటయిరిని రాజ్యవ్యవ
స్థలోని యొకని పి శేషము, ఇందు కష్ణ ములులేని సంచర్పణ్రముళోంబన్న
రాంబట్టు కోనవలశిని శాసించెను, ప్రగార్వమునుండి జరుగుచు లోకు_
లకు బాధకరముగానన్న చిల్లరకన్న లనేకములు తీసివేనేను, వర్తక
ములో మోసములేకుంచ తూనికెలను కొల్లలను సిసలు పతిచేను.
అంతకుంబూర్వము రాజకీయాధికారులకుం ప్రజలయొద్దినుండి కొన్ని
బహుశుతులు దొరకుచుడేను, హానినాపి యధికారులకు నే లజితముట
నిగ్గయించెను. అందుచేం ప్రగులకు గలుగు బాధలు తొలంగెను. —

(b) నాయనా! నీవు సేనని పలికవంజాలు, విశేషము లనావశ్యక- 35
ములు, నాయభిప్రాయ మేమో చెప్పైదనో, సృష్టిస్థితిలయకారణం-
దున్ను, సర్వజగన్నియామకుండును, సాధురక్షకుండును, దుర్మార్గశిక్షకుం-
దున్ను, సర్వస్వతంత్రశక్తిసంపన్నుండును, కారణబంధకూస్యుండును,
సర్వవ్యాప్తిండును, సచ్చిదానందమయస్వరూపుండును, స్వేచ్ఛాను
సారవర్తనుండును, కారణబంధకూస్యుండును, సర్వప్రాణ్యంలరసాక్షి
భూతుండును, పాపనాశనావసరానుసా విరచితభూలోకావతారుం
దునూ, స్తోత్రప్రియుండును, బ్రాహ్మణప్రియుండును, వైదికకర్మ
ప్రియుండును, సర్వమంగలగుణసమంజనుండు సగుభగవంతుం డెక్క్వ
డమో యున్నండునుసరిక సతనికనాన్యైనిష్ప మేయని యొకండు,
నాన్యైంగోపసని మతీయుకండు, నాన్యెం దటస్థుండని నతీయొకండు
నావైదికకర్మములచేతం జైవులు నులిపియాత నిని స్వాధీనపఅులుననీ
నుతీయొకండు, నూరేనేరి పోవుస్థటు సాత్త్రీ్త్కించిపరమం లిచ్చవఅుకు
నొరుకబుచ్చికొనిసరకాఖులు విధుకు సని నుతీయొకండు, పా్త్క్షన్
ములకులోంగకపోయిననమెడల ధనమునకు నేనేనేరందిర్రిలోంగు నని
నుతీయొకండు, సెను బ్రాహ్మణండును, దైసమునసంంగోపము వచ్చి
నన్నైస నాసకక్ మిందిర్ససయూండదని నుతీయొకండు దైపమునకులో
నేను పునిందు గల్లుపోసినయడలంఎలక పండిసైచినదుకక్వల నాగు
మ్మములోంగాపునడియుండఈ సని మఖియొకండు స్వష్ణ మునమాపంచపా
ఖిలోనికి కచ్చినానులకయంచము సైంగంల్పుసై పునం గూర్ప్చండిఫాతో
యాటలాడి సస్ప్సి, పోడి పరిహాసములు పిసి, సిడకనిప్పసనాతో ఇగూడ
స్వగ్ంగాలంకలలోంబుట్టిన పోగాకుమట్టంగాల్చియుమియ సడి మాయను
సలిమేనసత్త నెత్తి సైంభడనామె కల్లంఇదిసికొనియొకటి పడ్డించుటు.
తోడ్నేకాలుచున్న మట్టచూరయలోంచెట్టికాలు కొలదిదూంకనాండని
నుతీయొఖండు, తసయొడలలోని మాలం జేటీపింఛినాయుండ నెత్తిసైన
గిడిం జేయింఛినాండని—

(c) సకలవిద్యలసార్గమును, రాజ్యనిర్ణాకర్ప్త్తృ్యమును, లౌకిక 35
వైదికవ్యవహారనిపుణతయు, స్వభధర్మక్రియ్యు స్వదేశస్వజనభక్తిమ్ము,

2

ఆనుపమేయమైన రాగ్యమును ఏకీభవించి మూఘకపద్యార్థ్యస్వరూపమున నవతరించ నని చెప్పుటకు సంజేహములేదు, సవ్యాపమునకం బూర్వమి సత్పురుషునకు మూఘవాచార్యులని వేరు, తురియాశ్రమయస్వీకరించి శృంగేరిపీఠమునధిష్ఠించిన తరువాత నీనవ్యంయునకు విద్యారణ్యులని పేరు, ఈయాదవులు బ్రాహ్మణాలు, వీరిదియాజుర్వేదము, బోధాయనస మూ్రిము భారద్వాజగో్రిము, వీరియింటి పేరు సాయణివారు, తల్లి పేరు శ్రీసుతి, తంత్రిపేరు మాయణమందు, ఇనినికి సాయణభోగనాళులను సోదరులిద్ధఉండిరి, వీరాంస్తులనిమ్ము నిమ కలనిమ్ముగొంకఅులు పాసిమ్ము న్నారు, కానియాంధ్ర బ్రాహ్మణులకా బోధాయనసమూస్తులులేని. గాపున యామూఘవాచార్యులవారాంధ్రులు నగరి యానిశ్చయము, వీ్డ స్థించిన శృంగిరిపిఠము వీంధ్ర పుంమున శ్రీనచ్చిదానంద శివాభినవ న్పసిహ భాగతీ్యస్వ్యులవాపువిగ్రహ మూర్చగులు, నుటీకినాంటిపాని. మూఘవాచార్యులయాను ప్రథము పాజహో, ఉక్కిదాను, ద్వతీయ హాన హాలరాజుల కాలములోవాకవరం త్రిగినసహింబోధకుంవు నమువేను. ఇవిని రమ్మడగు సాయణాచార్యలను హాంహాంహారరాజుయొక్కియన్న సమాయండగు సంగసరరాజనొద్దయంత్రి గానుందేను, హారిహాంబుక్కి రాయులును స్వంగ్య సంస్థాపనముసకుంఉరినొఱ్ఱి యానస్య సామాన్య వైభరభూమిలింబుకు వినయ సగిసా్రా్యమును నాతనయముగాని స్తించిన శ్రీయాస్సంలము మాఘవాచా్యులదయే నని నొక్కి-సకా్కి శించుపచ్చును, హారిహారబుక్కింఓయాలు సేనసకుమా్రమ్మ బజులుగా ఉండిరని మిక. ఆఖ్యభాగ సరలమం నా్ర పుస్వీకా మునకుం బూర్వమును రిరుపంరసు మూఘపపివ్యా్వ్య లే నహించిచో నినమ నేతిహ్యముకలను, సుత్త్యాశ్ర స్వీకారము చేనై హికిక పొఖ్యములంపెంపమా్వ మును విచ్చలేనివాళమ్మును దేశయంలము ప్లెచ్చులకలన నరా్జక మగుటము తా్రోపస్థా్క న్యముల్ని ఉసనించుటమునంజా-ది స్వదేశస్వపురంలను ఉద్ధరించుటకకేవలనిగ పేష్కబుద్ధితో్ని మహాసుభావుందు విజయనగరమును హిందుసామ్రా్జ్య- మును నిర్మించిగని నంద ద్వితీయ మహాపురుషుండని చెప్పవలసిమున్న కి.

First Paper.—Part (A).

TRANSLATION FROM TAMIL INTO ENGLISH.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Translate into English *any two* of the following passages :—

(a) பண்டைக் காலத்தில் குமணன் எனனும் பாரிக் 35
தியன் ஒருவன் இருந்தான். அவன் அந்நாடத்தில் இருக்
தசெக்காமர்த்திகள் அணைவரிலும் பெரியர்படைவன்: எற்
றேழருக்கு இல்லைபொன்னு நவான்: அந்தபாரி அடைக்
கதோரன அன்புடன் ஆதரிப்பவன்: கல்விக்கடலக்கமா
கண்டவன். இத்தகந் தமனார்ர்ங்கு வந்த தியின் கற்குணகற்
செய்கைகளாயும் கல்வியறிவையும் கேள்வியுமையாவை
யிராமல். அவனருடைய அருவலைபுரானை கவின்கேளப்படுகோ
விலிவழுவார்கள். அவன் கவினியின் அருமைசமாகேரக்கிக்
தக்கவாறு பாரிக அளிப்பவன். எற்றுமைக்கற்றுரே நாழ
மவரி எனரப்படு கான்தேகமயிர் புலவர் படிர் புலவலேரி
புகழ்த்து பாடவுருவரி. அவர் நெருக்கெல்லாம் மன்னவன்
பெருகநிதியளரங்கெலக்தான். குமணனுக்குர் ரேகாதவன்
ஒருவன் உண்டு. அவன் சிறி யும் கல்வியறிவு இல்லாதக்
வன்; இரக்தோரிக்கு எள்ளளவும் சயான் குரிக்கமா
குரிக்கிருற்பவரரி: எனருரப. அவனேர் எதுகாழ ஸ்சாவன்
பொராப்தக்கொன்றே இருந்பாம்கள். அழக்கக் குறுக்கி செரன்
அவனுக்தகான்தேகமயிர் நாரிபொருக்கேகெரப்பா அருபரிக
தாரகள். ஐயா! உரற்றைபடா நமையனைபாகிய குரானைச்
சக்கரவர்த்தி. முன்னிலில்லாமால் வரக்கவர்நெருக்கெலகல்லாரர
வழங்கெ வருகிருரி. எனவைகருயினும் அளவைரிக்தா அரிரிக்
வன் எனரு கூறிியி நடப்பதை அவர் கவனிப்பவாதகக்
காண்விில்லை, இவ்வாறு செய்தா வக்தால் ராஜியம் எவ்வாறு
இல்லெபருரும்? இதனல் கோரக்கடிய கற்படை முழுவில்
உட்முகட்டடியதியாரகும். எனறு புலவாரறுகூறினர்.

(b) இவ்வருஷம் டிசம்பர் மாஸம் மாடர்ன்ரிவ்யூ   35.
என்னும் பத்திரிகையில், இந்தியர்க்கு இசைந்தவித்யாதாகத்
தைப் பற்றி, ஓர் இங்கிலீஷ்பத்திரிகையில் 1913 வருஷம்
ஆகஸ்டி மாஸத்தில், குக்ஸன் என்னும் ஒரு ஆங்கிலேயர்
எழுதியதினின்று, ஓரம் ஸம் எடிக்கப்படடிருக்கின்றது.
அதை இவ்விடம் விவரிப்போாம், இந்தியர்க்குக்கல்விகற்
பிப்பவர் அக்கல்வி தேசத்தின் அபிவிர்த்திக்குப் பொருந்
திகிற்கச் செய்யவேண்டி, இங்கிலீஷாயிருப்ப தெல்
லாம் யாவர்க்கும் கன்மையனிக்கவேண்டும். எனும். காமது
வழக்கமானமூடளிஸ்வாஸத்தையிட்டு இங்கிலீஷ் வாத
யார்களையும் பயிற்சியையும் இந்தியர்க்குக் நந்தோம்.
இவையிாண்டும் கிழுக்கு, தேசத்தினை இங்கிலீஷ்க்
காராகமாற்றலில்லே. எனெனில். இந்தியர் இங்கிலீஷ்
காரான்று இப்போாது இந்தியர் உலகுக்கில் மற்றதேசசுக்
தாருடன்வர்க்குகக்கிழும் கைத்திதொழிலிலும் போாராட
வேண்டியிருக்குலால், பதார்த்து விசாசவிஷயமாக போற்
குதேசத்தார் விர்த்திசெய்க ஸாஸ்ரங்களிலும் கைக்
தொழில் பயிற்சியிலும். இந்தியர்க்கு எவ்வைவை கற்பிக்
தானும் பொாருக்தும், ஆனல் அவர்க்குண்டான ஸ்வபா
வவிர்த்திக்கு. அவிக்குப் விந்தைக்கு பிராணகாரமாக
இருக்கவேண்டியாது லோகாங்காவிஷயபேம, லோகாங்கா
ேம கீழ்தேசத்கினைக்கு உக்பபுவி பொாத்தது, மனிதர்
மதவொன்றில்லதான், தபடு உயர்கிலையைப் பொாருந்து
யின்றனர். இந்தியா தேசமெங்கும், ஸ்கூல்களும், கமேஜ்
களும் உண்டாக்கி அவற்றுள் தேசாங்தாவித்தைகளைச்
இறப்புடன் ஸங்கிதப்பாடிப்போாதிக்து,

(c) அப்போாது அவன் தன்றெடேகூட வந்தவர்   35.
கள் அவ்வோசைத்துக்கு காரணம் யாதென வினவினன்.
அதற்கு அவர்கள் ஓ பிள்ளாய் ! இங்கு ஓர் ஆலயபிருக்
கின்றது. அங்கு அடிக்கும் மணியோசையே இது என்ற
னர். அதற்குக் கண்ணப்பன் ஆலயமாவதுயாது? ஆங்கு

ஏன்மணியடிக்கப்படுகின்றது? என்று வினவினன். அதற்
கு அவர்கள், அப்பா பிள்ளாய்! அவ்வாலயத்தில் ஈஸ்
வரண் இருக்கின்றர் அவருடைய ஆராதனத்தின் பொ
ருட்டிமணியடிக்கப்படுகின்ற தென்றனர். அதைஈனக்கேட்
டதும் கண்ணப்பனுக்கு 'ஆலயத்திலுளானவன் ஈஸ்வரன்
என்கிற புத்தியுதிக்கதன்றிச் சிலர் புத்திஅறிதும் உண்
டாகவில்லே. பிறகு அவன் ஈஸ்வானுவது யாவன் என்று
வினவ அவர்கள். உலகெமெல்லாவற்றிற்கு நிறைவன்.
அவன் வேண்டியதைத எல்லாம் தருவோன். அவன் அழ
கினில் சிறந்தவடிவன் என்று சொன்னுர்கள், அதைஈனக்
கேட்டதும் அவ்வாறுள்ள ஒரி புருஷன் ஆலயத்திலிருக்
கின்றதாக எண்ணிணேயன்திச்சிலேயைச் சிரிதும் கரு
திணனில்லே. பிறகு அவஷ் ஓஹோ! உலகெல்லாஉற்றிற்
கும் சக்கொவர்த்தியாபுள்ளவனும் மிகவும்பொருமைபொற்ற
வனுமாபுள்ளவன் இக்காளத்த்திககினில் என் அகப்படட்
டுக்கொள்ளவேண்பின்! அத்கஸ்திதியிலிருக்கின்றவீன
நாம் பார்க்காமலிருக்கக்கூடாது என் இங்ஙனம் கருதிய
வனுய் அவ்வாலயபிருக்தும் திசையை நோக்கிச் சென்
றன். அப்பாடிச் செல்லுங்காலத்திலும் அவனுக்கு ஆல
யத்திலிருக்கின்றவன். தின்னிய புருஷன் எனும்பாவீன
யிருந்தடேயன்றி சிவவிதிகஷ் உள்ளதெனும் சில புத்தி
ஏற்படாவில்லே.

First Paper.—Part (A).

TRANSLATION FROM SINHALESE INTO ENGLISH.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Translate into English any two but not more than two of
the following passages —

a. ඒවද මෑතභාගයෙහි එක්සමයෙක්හි අනේ පිඩු
මහසිටාණෝ බඩුපිරූ පන්සියයක් ඇල් ඵසල්දනාවිවට
ගැව්වාහුය. සිටානන්ගේ මිනිස්සු පසල්දනාවිවට
ගොසින් තමන් ගෙණ‍ැයිය පඩුරූ පසල්දනාවිවැසි
සිටානන්ට පෑදුවහ. සිටානෝද තොපි හැම කොයි
සිට අවිදැයි විචාර සැවැත්නුවර නුඹවහන්සේගේ
යහලුවූ අනේ පිඩු සිටානන්වහන්සේ ලඟ සිට ආම්හයි
කිකල්හි අනේ පිඩු මහසිටානෝයසියන තමකුත්
මිනිසුන්ට ඈද්දැයි අපහාසකොට කියා තමන් ඇව්
පඩුරූත් ඇරගෙණ යහපත තොපි නික්මෙවසි කීහ.
ගිය පුරුෂයන්ට සිඳිනා තැනක්වන් බත්වැවුප්
ආදියක්වත් විචාර නුදුන්න. එසැල්හි ගිය පුරුෂයෝ
තමන් ගෙණයිය පඩුරු තුමුම විකුට ඒරවින් උවමනා
පඩුරු ඇරගෙණ සැව්ැත්නුවරට ගොසින් අනේ පිඩු
මහසිටානන්ට එපවත් කීවාහුය., නැවත කලාතුර
කින් පසල්දනාවිවැසි සිටානෝ ගැල් පන්සියයක
බඩු පුරෝ‍ සැවැත්නුවරට යව්වාහුය. ඒ පුරුෂයෝ
තමන් ගෙණ‍ගිය පඩුරු ඇරගෙණ ‍අනේ පිඩු මහ
සිටාණන් දුටහ, එකල්හි අනේ පිඩු මහසිටානන්ගේ
මිනිස්සු මෙසේ කීහ. " ස්වාමිනි ! ඉම් ඇ සියල්ල
වුන්ට සිඳිනා ‍ගොවල් බත්වැවුප් දිමත් අපට භාරයයි"
කියා ඔවුන්ගේ ගැල් පිටිවුවර ඵත්තර ස්ථානයක
මුදවා තොපි හැමදෙනම මෙතැන්හි ඉඳුවසි තොපි
හැමදෙනාටම බත්බුලත් ආදී සියල්ලම අපගෙන්
ලැබෙන්නේයයි කියා ඔවුන් විවරක් නොහැර
උදුරාගෙණ රත් අදියා ‍ගොන් ඒ ඒ තැන දුහුබඳවා
ගැලින් රතසක් ගලවා ගැල්පිට තබා ගැලයක් හැර
ගෙණ ගියාහුය.

[35]

6. **පැමිණි රාජ්‍යාභිෂෙක ඇත්තාවූ ඒ ශෙනාරතන** 35
නරෙඳුතෙම නිරන්තරයෙන් ආදර ඇතිව දනාදි
ප්‍ර‍ණ්‍යකෘතීයන්හි යෙදෙන්, එකල්හි සිව්සඟර
වනිත් ජනයන් රජනයකොට දනතාධාතුපූජව හා
මහඳන් පැවැත්වී. එකල්හි හෙ තෙමේ දෙට
ඹයාහොයුරුවූ නරෙඳුයන්ගේ මෙහෙසියම අඟ
මෙහෙසුන්කොට ඒ නුවර වාසයකෙළේය. එකල්හි
කොළොම්තොබ සිටි වෙළෙන්ගේ බොහෝ කලක්

එසේ සිට ක්‍රමයෙන් උත්සනනාවුහ. මිසදිටු ගත්
පවිටු කෘරිරු දරුණු පරංගි නම්වූ ඒ සියල්ලෝ
ඉහනොඇදූ ඒ ඒ රට ඉහස් ඉකත්වත් නයන්නාහු
ඉහවල් ගම් දවන්නාහු කුලපරඬරාවන් නයම්න්
මෙහෙ සිංහලයන් වැනසුහ. පුරයන්ද ඉවෙවාෂ
රමයන්ද ප්‍රනිමාමඬිරයන්ද බිඳ ඉබාඩිවිෂෂ ප්‍රනිමා
දින්ද නාසා බුඩශාසනය හා ඉලාඛයද වනාසා ඒ ඒ
තැන බලයොවුද බැද යුදනාරමින් සිටයෙත්හ.
එකල වන පවිවන නුදෑ දෑශ්ගස්ථාන් ඇති පන්සිය
ආදිරට දනත ධාතු ස්වාමින් ඉගන්වා ඡිඩිහය
ස්ථානයෙක්හි පිහිටුවා ධාතුරඞෂාවෙහි නියුක්තා
යන්ද එහිම වස්වා පූජාවිධිය පවත්වමින් දනත ධාතු
ස්වාමින් ඉමානවට රෑෂ ඒ ශෙනාරතන නම්
නරෙඳුතෙම ඒ පුරයෙන් නික්ම භායතාසාර වසතු
ආදින් හා දෙවු බැ රජ්හුගේ පුනුඛන්ද ඇබ සහිතවූ
ප්‍රවර ධන්‍ය පුණ්‍ය ලෂෂණ ඇති ස්වකීය මහෙසිකා
වුන්ද ඉමානවට ඹයාඟෘ විධිඉයන් ඉගෙණ මහි
යඬඛඟණයට් හිගෙය්. ඒ නරෙඳුයා එහිම වසනා
කල්හි ඒ ඉමහෙසුසිතොමෝ ඉතා යහපත් නයාඉතෘක
ඉතාජස් ඇති පුනුයෙක් ප්‍රසව කළාය.

භාතානාහෝ නමැති එක් සිංහල මිනිසකුට 35
ඹිමෙක් සිවිඉයය්. ඒ ඹිමා දුවු දුවු ඹ්‍රිනිස්සු අල්ලාඉගෙණ
ඉහාස් වෙල් මැඩවිඹට යොදනි. උෟ අල්ලාඉගෙණ
අසවල් තැන උෟ ලවා ඹඬවනවාය කියා ආරංචි
ලැබුනාම භාතානාහෝ එහි ඉහාස් ඒ ඹිනිසුන්ට
බැණ දෙඩා උෟ නැවත ඉගෙණවුත් මුඩුහරින්ඉන්ය.
මෙඉසේ එක් දවසක් ඉකතනක් ඒ ඹිමා බැදගන
ඉහාසින් භාතාවිට එතනට භාතානාහෝ ඉහාස්
ඹහුට බැණ ඹිමා ඉල්ලුඉවිය. එඉහත් ඒ අය "ඉතාට

ඇනි ශිමෙක් නැතා" කියා බැණ ශීමා න්‍රුදන්ෙන්ය.
ඒවිට භාතාභාෙහ් විවිකට රජකළ ගජබාහු රජෙග්
පියවු පළමුවෙනි විජයබාහු රජ සමීපෙයෙහි ඒ කරුණ
ෘමිණිෂ්ලිකර සිටිෙයා. ඒ බව ඇසු රජ කාණගාවුවි
අපරවිකාරයන් අල්ලා ෙගෙණනා ෙලය නිෙයාග
ෙකාෙළ්ය. ඒ අපරවිකාරයෙ ව්‍රදනත් බඦපුර්විත්
 කාරෙයි වුහ. රජ ඔවුන්ට උදහස්වූ බැවි අසා කිය
පත්ව රජ්ෙග් අලාත්‍ෂයන් ෙවතාට ෙගාජ ඔවුන්ට අෙ
ලස් ඳි " භාතාභාෙහ්ට ඇනි ශීමෙක් නැතා. එෙතම
පිස්ෙයකා. ශිවුන් ලවා භාන තැන්වලට ෘමිණ අමි
ශිමා මඟෙයයි ශීමා ඉ‍ල්ලන්ෙන්ය." යනාදි ඇසන් බජ
රජ්ට කියා නාඩිව, අහක්කරණ ෙලය ඉ‍ල්ලා සිටිෙය්ය.
එිවිට රජ්පුරෙවි භාතාභාෙහ් පිස්ෙසන්‍යඩි පිළිෙගෙණ
ඔහු පන්නාදම අපරවිකාරයන් ජිඳහස් ෙකාෙළ්ය.
එිකාෙළිසි භාතාභාෙහ් අඩක ෙශාකයට පත්ව ෙමබඦ
ඇසාඛාරණ කරණ රටක සිටිනාවිට විඛ ඒය
ආත්හැර යාම උත්‍ඩමැඩි සිතා ෙමරටට එිහ යනා
ෙව‍ඦද නැවසින් ඉෂ්‍යාෙවි ෙකාල්‍සමරට පිටත්ව
ගිෙයය.

Translate into English any *two* of the following three passages:—

(a) ಒಂದಾನೊಂದು ಕಾಲದಲ್ಲಿ, ಮಿರ್ಮಿಡಸ್ (Myrmidons) 35
ಜನರ ಅಧಿಪತಿಯಾಗ ಪೇಲಿಯಸ್ (Peleus) ಎಂಬ ರಾಜನಿಗೂ
ಸಮುದ್ರ ರಾಜನ ಮಗಳಾದ ಥೇಟಿಸ್ (Thetis) ಎಂಬ ಕುವಾರಿಗೂ
ವಿವಾಹವಂ ಗಳವ್ರು ಬೆಳೆಯುತ್ತಿದ್ದಾಗ, ಏರಿಸ್ (Eris) ಎಂಬ
ಕಲಹಾಭಿವಾನಿಯಾಡ ದೇವತೆಯೊಬ್ಬಳನ್ನು ಬಿಟ್ಟು, ಮಿಕ್ಕ
ದೇವತೆಗಳೆಲ್ಲರೂ ಆಹ್ವಾನಪೂರ್ವಕವಾಗಿ ಬರಮಾಡಿಕೊಳ್ಳಲ್ಪ
ಟ್ಟರು. ಆಗ ಕಲಹದೇವಿಯು ಕೋಪಿಸಿಕೊಂಡು, ಆತಿಥಿಗಳೆಲ್ಲ

ಕುಳಿತಿದ್ದ ಸ್ಥಳದಲ್ಲಿ—'ಪರಮಸುಂದರಿಗೆ!'—ಎಂಬುದಾಗಿ ಕೆತ್ತು
ಗೆಯಿಂದ ಬರೆದ ಬಂಗಾರದ ಸೇಬುಹಣ್ಣೊಂದನ್ನು ಬೀಸಾಡಿದಳು.
ಆಗ ಅಲ್ಲಿ ಅತಿಥಿಗಳಾಗಿದ್ದ, ದೇವರಾಜನ ಪತ್ನಿಯಾವ ಹೇರಾ
(Hera) ಎಂಬ ವಳೂ, ಸಂಪನ್ನಭಿಮಾನ ದೇವತೆಯಾದ ಎಥೇನಾ
(Athena) ಎಂಬವಳೂ, ಕಡಲೊಳ್ಳೊರೆಯಲ್ಲಿ ಜನಿಸಿ ಅನನ್ಯಸುಂದರಿ
ಯೆಂದು ಪ್ರಖ್ಯಾತಿಗೊಂಡ ಅಫ್ರೊಡೈಟ್ (Aphrodite) ಎಂಬವಳೂ,
ಆ ಹಣ್ಣೇ ಗಾಗಿ, ಸ್ಪರ್ಧಿಸಿ ಕಲಹವಾಡುವುದಕ್ಕೆ ಪ್ರಾರಂಭಿಸಿದರು.
ಇದನ್ನು ನೋಡಿ, ದೇವಾಧಿದೇವನಾದ ಜ್ಯೂಯಿಸ್ (Jues) ಎಂಬ
ವನು ಕಲಾಕೌಶಲಗಳ ಅಭಿಮಾನ ದೇವತೆಯಾದ ಹರ್ಮೀಸ್
(Hermes) ಎಂಬಾತನಸ್ನ ಕರೆಮ— 'ಈ ಸುಂದರಿಯರನ್ನು ಟ್ರಾಯ್
(Troy) ದೇಶದ ಪ್ರಿಯಾಮ್ (Priam) ರಾಜನ ಪುತ್ರನೂ ಸರ್ವಾಂಗ
ಸುಂದರನೂ ಆದ ಪ್ಯಾರಿಸ್ (Paris) ಕುಮಾವನ ಬಳಿಗೆ ಕರೆದು
ಕೊಂಡುಹೋಗು. ಮತ್ತು ಆತನಿಂದ ಈ ವ್ಯಾಜ್ಯವನ್ನು ತೀರ್ಮಾ
ನಮಾಡಿಸು,'—ಎಂದು ಆಜ್ಞಾಪಿಸಿದನು. ಆ ಮೇರೆಗೆ, ಎಲ್ಲರೂ
ಅಲ್ಲಿಗೆ ಹೋರಿರು. ತಮ ತಮಗೆ ಅನುಕೂಲವಾಗಿ ತೀರ್ಮಾ ·
ನವಾಗಬೇಕೆಂಬ ಈರ್ಷೆಯಿಂದ ಆ ದೇವತೆಗಳಲ್ಲಿ ಪ್ರತಿಯೊ
ಬ್ಬರೂ ಬಗೆಬಗೆಯಾಗಿ· ಪ್ಯಾರಿಸ್ ಕುಮಾರಸಿಗೆ ಆಶೆಯನ್ನು
ತೋರಿಸಲು ಪ್ರಾರಂಭಿಸಿದರು. ತನಗೆ ಆ ಹಣ್ಣು ಕೊಟ್ಟಿಯ್ಯಾವರೆ,
ಆಸಿಯಾಖಂಡವ ಏಕಛತ್ರ ಕ್ರಾಧಿಸತ್ಯವನ್ನೂ ಅಗಣಿತವಾದ· ಧನ
ವನ್ನೂ ಕೊಡುವೆನೆಂದು ಹೇರಾದೇವಿಯೂ,—ಅನನ್ಯ ಸಾಧಾರಣ
ವಾಧ.ಯಶಸ್ಸನ್ನೂ ಜಯವನ್ನೂ ಕೊಡುವೆನೆಂದು ಎಥೇನಾದೇ
ವಿಯೂ,—ಲೋಕೈಕ ಸುಂದರಿಯಾದ ಪತ್ನಿಯನ್ನು ಕೊಡುವೆ
ಕೆಂದು ಅಫ್ರೋಡೈಟುದೇವಿಯೂ ಆತನನ್ನ ಪ್ರೇರೇಪಿಸಿದರು. ಇವ
ರೆಲ್ಲರೂ ಪ್ರಬಲದೇವತೆಯಾಗಿದ್ದ ದರಿಂದ, ಯಾರನ್ನೂ ಅಸವಾ
ನಾನಪಡಿಸಲು ಸಾಧ್ಯವಾಗಿರಲಿಲ್ಲ. ಕೊನೆಗೆ ರಾಜಪುತ್ರನು ಆ
ಹಣ್ಣನ್ನು ಅಫ್ರೋಡೈಟಗೆ ಕೊಟ್ಟು,.ಅವಳೇ ಪರಮಸುಂದರಿಯೆಂದು

ತೀರ್ಮಾನವೂಡಿದನು. ಕೃತಕೃತ್ಯಳಾದ ಆ ದೇವಿಯು ಆ ರಾಜ **ಪು**ತ್ರನನ್ನ ಸ್ಪಾರ್ಟಾ (Sparta) ರಾಜ್ಯಕ್ಕೆ ಕರದುಕೊಂಡು ಹೋಗಿ, ಆ ದೇಶದ ಮೆನೆಲಾಸ್ (Menelaus) ಎಂಬ ರಾಜನ ಮಗಳಾದ ಹೆಲೆನ್ (Helen) ಎಂಬ ರಮಣೀರತ್ನವನ್ನು ತೋರಿಸಿಕೊಟ್ಟಳು. ಪಾರಿಸ್ ಕುಮಾರನು ಉಪಾಯಾಂತರದಿಂದ ಆ ಸುಂದರಿಯನ್ನು ಒಲಿಸಿ. ಅವಳನ್ನು ಹಾರಿಸಿಕೊಂಡು ಓಡಿಹೋದನು

(೬) ಕದಂಬರಾಜವಂಶದವರು ಅರ್ಧರೆಂದೂ ಅರ್ಧರಲ್ಲವೆಂದೂ   ೩೬ ಎರಡು ಅಭಿಪ್ರಾಯಗಳಿವೆ. ಮಹಾಭಾರತದ ಕಾಲದಲ್ಲಿ ಯಾವು ದೋ ಒಂದು ಅರ್ಧರಕುಲವು ದಕ್ಷಿಣಕ್ಕೆ ಇಳಿದು ಸಹ್ಯಾದ್ರಿ ಘರ್ವತಗಳ ಕೆಳಗಣ ಸೀಮೆಯಲ್ಲಿ ನೆಲೆಸಿಂತು, ಅಲ್ಲಿಯ ಮೂಲಸಿವಾಸಿಗಳಾದ ದ್ರಾವಿಡ ಜನರೊಡನೆ ಕಲೆತುಹೋಗಿ. ಕ್ರಮೇಣ ಒಂದು ರಾಜ್ಯವನ್ನು ಸ್ಥಾಪಿಸಿದರೆಂದು ಕೆಲವರು ಹೇಳುವರು. ಕದಂಬರಾಜರು ಕರ್ಣಾಟಕದೊಳಗೆ ಒಂದಾ ನೊಂದು ಕಾಲದಲ್ಲಿ ಪ್ರಬಲರಾಗಿದ್ದ ಕುರುಂಬ ಅಥವಾ ಕುರು ಬರೊಳಗಿನವರೇ ಆಗಿರಬಹುದೆಂದೂ, ಕುರುಂಬ ಎಂಬ ಶಬ್ದವು ಸಂಸ್ಕೃತದ ಸಂಸರ್ಗದಿಂದ ಕದಂಬವಾಗಿರಬಹುದೆಂದೂ ಕೆಲ ಪರು ತರ್ಕಿಸುತ್ತಾ ರೆ. ಈ ವಂಶದ ಸುಮಾರು ಇಪ್ಪತ್ತೊಂ ಮುಮಂದಿ ರಾಜರು ಹಚ್ಚು ಕಡಿಮೆ ಇನ್ನೂರೈವತ್ತು ವರ್ಷ ಕಾಲ ಅಳಿದರೆಂದು ತೋರುತ್ತದೆ. ಇವರಲ್ಲಿ ತ್ರಿನೇತ್ರ ಕದಂ ಬನೇವೊಲನೆಯವನು. ಈತನು ಆನೆಗೊಂದಿಯ ಬರ್ಬರ ಅರಸರನ್ನು ಜಯಿಸಿ, ಕದಂಬರಾಜ್ಯವನ್ನು ಸ್ಥಾಪಿಸಿದನೆಂದು ಹೇಳುವರು. ಕದಂಬರಾಜರಲ್ಲಿ ಮಯೂರವರ್ಮನೇ ಮಹಾ ಪರಾಕ್ರಮಿಯೆಂದೂ ಧಾರ್ಮಿಕನೆಂದೂ ಪ್ರಸಿದ್ಧಿ ಪಡೆದನು. ಇವನು ಕ್ರಿಸ್ತ ಶಕದ ಎರಡನೆಯ ಶತಮಾನದಲ್ಲಿ ಆಳಿದನು. ಕದಂಬ ರಾಜರಿಗೂ ಕಾಂಚೀಪುರದಲ್ಲಿ ಆಳುತ್ತಿದ್ದ ಪಲ್ಲವ ಅರಸರಿಗೂ

ನ್ಯೇಷವಿದ್ದಿತು. ಮಯೂರವರ್ಮನು ಪಲ್ಲವ ರಾಜನನ್ನು ಗೆದ್ದು
ತನ್ನ ರಾಜ್ಯವನ್ನು ಕ್ರೀಪರ್ವತವ (ಕರ್ನೂಲು) ವರೆಗೆ ವಿಸ್ತರಿ
ಸಿಧನು. ಪಲ್ಲವ ಅರಸರು ಜೈನಮತದವರಾಗಿದ್ದ ರೂ ಬ್ರಾಹ್ಮಣ
ರನ್ನು ಅತ್ಯಾದರದಿಂದ ಕಾಣುತ್ತಿದ್ದ ರು. ಮಯೂರವರ್ಮನೂ
ಅವನ ಮಗನಾದ ತ್ರಿಣೇತ್ರ ವರ್ಮನೂ ರೋಹಿಲಖಂಡದಲ್ಲಿ ಯ
ಅಹಿಕ್ಷೇತ್ರವೆಂಬ ಪಟ್ಟಣದಿಂದ ಕೆಲವು ಬ್ರಾಹ್ಮಣರನ್ನು ಸಂಸಾರ
ಸಮೇತ ಕರೆಯಿಸಿ, ತಮ್ಮ ರಾಜ್ಯದಲ್ಲಿ ನಿಲ್ಲಿಸಿಕೊಂಡರು. ಈ
ಬ್ರಾಹ್ಮಣರ ಸಂತತಿಯವರೇ ಈಗಿನ ಹವಿಕರು. ಅಹಿಕ ಎಂಬ
ಪದವೇ ಕೆಟ್ಟು ಹೈಗ ಎಂದಾಗಿದೆ ಎಂದೂ ಅಭಿಪ್ರಾಯವಿದೆ.

ಕದಂಬರಾಜರಲ್ಲಿ ಅನೇಕರು ಅಶ್ವಮೇಧಗಳನ್ನು ಮಾಡಿದ
ರೆಂಬುದಾಗಿ ಲೇಖನಗಳಿರುವುದರಿಂದ ಅವರ ರಾಜ್ಯವು ಬಹಳ
ವಿಸ್ತಾರವಾಗಿದ್ದಿ ರ ಬಹುದು. ಇದರೊಡನೆ ಹುಟ್ಟಿದ ಅನೇಕ ಸಣ್ಣ
ದೊಡ್ಡ ರಾಜ್ಯಗಳು ನಿರ್ಗಾಮವಾಗಿ ಹೋದರೂ ಈ ರಾಜ್ಯವು
ಕ್ರಿಸ್ತ ಶಕದ ಅರನೆಯ ಶತಮಾನದ ತನಕ ಕಳೆಗುಂದಲಿಲ್ಲ. ಸಹ್ಯಾ
ದ್ರಿಯ ಮೇಲಣ ಬಲವಾದ ಕೋಟೆಗಳೇ ಭದ್ರವಾದ ಆಶ್ರಯ
ವಾಗಿದ್ದ ದರಿಂದ ಈ ರಾಜ್ಯವನ್ನು ಪಲ್ಲವರಾಜರೂ ಗಂಗರಾಜರೂ
ಮುರಿಯಲು ಹಲವು ಸಲ ಪ್ರಯತ್ನಮಾಡಿದವರೂ ಸಾರ್ಥಕವಾಗ
ಲಿಲ್ಲ. ಮತ್ತು ಕದಂಬರ ರೊಜ್ಞವು ಸುಮಾರು ಎಂಟನೂರು
ವರ್ಷಗಳಕಾಲ ಯಾರಿಗೂ ಕೈಮುಗಿಯದೆ ಸ್ವತಂತ್ರವಾಗಿ
ಇದ್ದಿತು. ಕದಂಬರಾಜರಹಸ್ರರು ವಿಜಯನಗರ ರಾಜ್ಯದ ಪ್ರಾದು
ರ್ಭಾವದವರೆಗೆ ಇತಿಹಾಸದಿಂದ ಮಾಯವಾಗುವುದಿಲ್ಲ. ವಿಜಯ
ನಗರವು ಘನತೆಗೇರಿದೊಡನೆ ಮೊದಲೇಬಲವಾಗಿದ್ದ ಕದಂಬ
ರಾಜ್ಯವು ಲುಪ್ತವಾಯಿತು. ಅವರ ರಾಜಧಾನಿಯಾದ ವೈಜಯಂತಿ
ಪಟ್ಟಣವು ತ ಕಾಲದಲ್ಲಿ ಘನಕನಕ ವ್ಯಾಪಾರಗಳಿಂದ ಪ್ರಸಿದ್ಧ
ವಾದ ಸ್ಥಳವಾಗಿದ್ದಿ ತೆಂದು ತಿಳಿಯುಬರುತ್ತಿದೆ.

(c) ಪಾಠಶಾಲೆಯಿಂದ ಮನೆಗೆ ಬಂದಕೂಡಲೇ ಜೇಮ್ಸ್ (James)
ತನ್ನ ತಾಯಿಯುಬಳಿಗೆ ಓಡಿಹೋಗಿ—"ಅಮ್ಮ, ದಳವಾಯಿ
ಯೆಂಬರೇನು ?—ನೀನು ಅಕ್ಕರೆಯಿಂದೋದಿದರೆ ಬಂದಾನೊಂದು
ಕಾಲದಲ್ಲಿ ನೀನೂ ದಳವಾಯೆಯೂಆಗುವೆ?—ಎಂದು ಹೇಳಿ ಸೆಮ್ಮ
ಗುರುಗಳು ನನ್ನ ಬೆನ್ನಿನಮೇಲೆತಟ್ಟಿ ನನ್ನನ್ನು ಮುದ್ದಿ ಸಿದರು.
ದಳವಾಯಿಯೆಂಬರೇನು ?"—ಎಂದು ಅತ್ಯಾತುರದಿಂದ ಕೇಳಿದನು.
ಎಲೀಜಿಯು (Eliza)—"ಮಗುವೇ. ದಳವಾಯಿಯು ಸೈನ್ಯಕ್ಕೆಲ್ಲಾ
ಅಧಿಪತಿ. ಅವನು ಯುದ್ಧ ಕಾಲದಲ್ಲಿ ಸೈನ್ಯವಮ್ಮ ನಡೆಯಿಸುವನು.
ಅವನ ಆಜ್ಞೆ ಯಂತೆ ಲಕ್ಷ ಕೋಟಲಕ್ಷ ಸಿಪಾಯಿಗಳು ಯುದ್ಧಮಾ
ಡುವರು. ಅವನು ಜರತಾರಿಯ ಕವಚವನ್ನ ಹಾಕಿಕೊಂಡು ಅಶ್ವಾ
ರೂಢನಾಗಿ ಕಯ್ಯಲ್ಲಿ ಕತ್ತಿ ಯನ್ನು ಹಿಡಿದಿರುತ್ತಾನೆ. ಸೈನಿಕರಿಗೂ
ದರೋ ಸಾಮಾನ್ಯದ ಉಡುಪಿರುತ್ತದೆ. ಅವರು ಬಂದೂಕವನ್ನು
ಹಿಡಿಮುಕೊಂಡು ನಡೆದುಹೋಗುತ್ತಾರೆ. ನಮ್ಮ ವಂಶೀಯರಲ್ಲಿ
ಯಾರೂ ಈಗಿನವರೆಗೆ ದಳವಾಯಿಗಳಾಗಿ ಬಾಳದಿದ್ದ ರೂ, ಅನೇ
ಕರು ದಳವಾಯಿಗೆ ಕಡಿಮೆಯಾದ ಅಧಿಕಾರದಲ್ಲಿದ್ದು ಮಾತ್ರ ಭೂ
ಮಿಯ ನೇವೆಮಾಡಿ ಪ್ರಖ್ಯಾತರಾಗಿದ್ದಾರೆ: ನಮ್ಮ ದೇಶವು ಈಗ
ಹೆಮ್ಮ ದಿಯೂಆಗಿದೆ. ಯುದ್ಧ ಸಂಭವವು ಇರುವುದಿಲ್ಲ. ಸಾಸಿರಾರು
ಜನರನ್ನು ಸಮಿಷವಾತ್ರದಲ್ಲಿ ಕೊಲ್ಲುವ ಯುದ್ಧ ವು ಘೋರವಾ
ದುದು. ನೀನು ಪಂಡಿತನಾಗಿ, ಕೀರ್ತಿವಂತನಾಗಿ ನರವಧೆಯನ್ನು
ಮಾಡಬೆಯೇ ದಳವಾಯಿಯಂತೆ ಖ್ಯಾತಿವಂತನಾಗಬಹುದು. ನಿಮ್ಮ
ಪೂರ್ವಿಕರು ಧೀರರೆಸಿಸಿಕೊಂಡು ಲೋಕಮಾನ್ಯರಾಗಿ ಬಾಳ
ದರು. ನಿಮ್ಮ ಮುತ್ತಜ್ಜ ನಾದ ಸಾಲೋಮನ್ ಗಾರ್ಫೀಲ್ಡ್ ಎಂಬು
ವನು ನಮ್ಮ ದೇಶದ ಪ್ರಾತಂತ್ರ್ಯಪದವಿಗಾಗಿ ಹಿಂದೆ ನಡೆದ ಮಹಾ
ಕದನದಲ್ಲಿ ಗಣ್ಯನಾಗಿದ್ದ ನು. ನಿಮ್ಮಜ್ಜ ನಾದ ಥಾವಸ್ಸ ನ್ಯೂ
ಯಾರ್ಕ್ (New York) ಸಂಸ್ಥಾನದ ಕಾಡುಗಳನ್ನು ಉರುಗಳ

ನ್ಯಾಗಿ ಮಾಡುವುದರಲ್ಲಿ ಪ್ರಥಮ ಪ್ರವರ್ತಕನಾಗಿದ್ದನು. ನಿಮ್ಮ
ತಂದೆಯಾದ ಏಬ್ರ್ಯಾಮು ಓಹಿಯೋ ಸಂಸ್ಥಾನದ ಕಾಡುಗಳನ್ನು
ಉರುಗಳನ್ನಾಗಿ ಮಾಡುವ ಕಾರ್ಯದಲ್ಲಿ ಪ್ರಥಮ ಪ್ರವರ್ತಕನಾ
ಗಿದ್ದನು. ಅಕಾಲಮೃತ್ಯುವಿಗೆ ಆ ಧೀರನು ತೊತ್ತಾದುದರಿಂದ
ಸೌವು ಈ ರಿಕ್ತಸ್ಥಿತಿಯಲ್ಲಿ ಕಷ್ಟವಡುತ್ತಿದ್ದೇವೆ. ದಳವಾಯಿಯಾ
ಗುವಪಕ್ಷಕ್ಕೆ ನಿಮ್ಮ ಪೂರ್ವಿಕರೆಲ್ಲರಿಗಿಂತಸೀಸೂ ಕೀರ್ತಿವಂತ
ನಾಗುವೆ. ಮಾತ್ರ ಭೂಮಿಯ ಕ್ಷೇಮಕ್ಕಾಗಿ ಪ್ರಾಣವನ್ನು ತೆರು
ವುದಕ್ಕೆ ಎಲ್ಲರೂ ಸಿದ್ಧರಾಗಿಯೇ ಇರಬೇಕು"—ಎಂದಳು.
ತಾಯಿಯ ವಚನಗಳನ್ನು ಚೇಮ್ಮಸ್ಸಬ್ಧನಾಗಿ ಸಿಂತು ಕೇಳಿದನು.
ಅವನ ಕಣ್ಣುಗಳು ಹೊಳೆದುವು. ಘೈಯ್ಯಯು ಹುರಿಯಾಯಿತು
ತಾಯಿಯು ಹೇಳಿದ ಅವರ ಪೂರ್ವಿಕರ ವೃತ್ತಾಂತವು ಅವನ
ಮನಸ್ಸಿನಲ್ಲಿ ನೆಲೆಗೊಂಡು ಸಿಂತಿತು.

1. *Sagal.*

A'gilsako a'ana bato chian bang'bata. A'gilsakni kosoko bodita biaprang chini kosako nao dongenga, una bato chini ning'o donggipan changgitam bata. Uni gimin a'ana bato chian mai majan bata. Indiba us chirangko dingtang difigtang uina gita, dingtang dingtang' bak dake uarangko dingtang dingtang bimungchi mingaha. Uarangkon sagal minga. Sagal namen apalbegipa chi ong'a. Sagalo mamungba dongpenga dongjani gimin balwa namen ta'rakbea, aro balwa ta'rakani gimin sagalni chi pokpekbea, aro chipakore satbea. Sagalni chi rang'sa pokpekatako man'ahaode, uan ruuta salua kingking dontsa, aro bate bate pokpekroroange dal'dalbegipa chipakkorerangko ong'katata avo indaken basakoba basakobade chipakkore dotprakan bewal a'bri dotprakni pal ong'-angpila. Indake chipakkore satbemitingo re'na namen kenbeani ong'a.

2. *Beaver.*

Beaverranga chio donggipa dal'begipa meserang gita ong'a. Uamang'a fut gni ro'a. Aro uamang'ni ki'me inch 10 ro'a. Indiba uamang'ni ki'me gipin matburungrangni ki'me gita ong'ja. Uamang'ni ki'me dal'gipa aro

uarango kimilni pal na'tok gita bisingkap ba sta dongskaa. Beaver mangsa selgnimangni pal jrima. Chio jrotnitingo uamang'ni ki'merang boitani pal ong'a, maina uachin uamang jipe jroa. Aro cha'na ba kam ka'na asongmi tingoba ua ki'merangan uamang'ni pangchake asongani ong'a. Bol cheksirangko tinsotna uamang'ni wagamrang namen rakbea aro matbea. Uchin uamang bol cheksirangko tinsote an'tangtangna nokrangko rika, aro chini kosako jangrangrangko kaa. Beaverrang nok rikna changbogiparang ong'a, aro uamang uarnang'ni nokrangko namen rongtalbeo rakia. Chi ta'rakgiparangni kosako, bol cheksirangchi gong-geske dake jang'rangrangko kana changa.

3. *Mikka.*

Isol an'chingna cha'aniko on'na ine an'ching poraia. Isol maikai cha'aniko on'a ? Nang'ni ma'a paa a'ako game miko aro me'suko man'a. Nang'ni ripeng saksani paa pondit ong'e uni dormahako ra'e cha'aniko brea. Aro ripeng saksani paa sorkarini kamko ka'e miko bree-cha'a. Isol on'a ine maikai aganna man'a ? A'a gamgipa miko ge'a, oe, indiba uko cha'e dal'atna amja. Mikka wajaode mi misirang chajawa¡ Mande mikka waatna amja, salkoba teng'suatna amja. Iarangko Isol dakjaode manderang mamungdakoba cha'aniko man'na ámjawachim.

Indiba saoba saoba agannaba donga, mikka waade an'tangni niav. gitasa waa. Isolni daka ong'ja. Indide an'ching mikka waani niamko chanchie nina. Mikka baoni ong'kata ? Aramrangoni ong'kata. Aram-rang baoni ? Uko bang'a manderang chanchikuja, uigipa manderang aramrang sagaloni ong'kata ine agana. Ia a'gilsako a'a ran'gipana bate sagalrang bata. Sagalni kosakoni chini biba pangnan chadoenga, aro kosakchi ka'sinbata balwako man'e uar biba chi pil'taia, aro a'aona ga'akpila.

First Paper.—Part (A).

TRANSLATION FROM KHASI INTO ENGLISH.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Translate into English *any two* of the following three passages:— 35

(*a*) Katno ka ba'khraw bad ka baphylla kane ka ri India ka long ! Ki ong ba ka heh khad-ar shah ia ka ri Bilat baroh kawei ! Haba ia-khein bad lyntor bad pyngkiang ka don palat khad-ar lak skwer mail, bad ki briw pat ki don haduh laispah million ! Kine ki ktien la ki long kiba lyngkot haba thoh, hynrei ka long kaba eh ba'n sngow-thuh haduh katno ki kit jingmut. Ba'n da pynieng ter-ter ia kine ki lai-spah million ki traishnong ka ri India, bad ai mar shi pruh ia uwei uwei u briw, ka lyntor jong ki baroh ka'n palat phra-phew-san haiar mail. Haba khein ia ka jingthew sawdong ka pyrthei ba ka long tang ar phew-san hajar mail, ngi iohi ba la dap briw ba'n ieng lyntor baroh sawdong ka pyrthei lai-sien shiteng.

Ka ri India ka long kaba donnam naduh mynhyndai kulong. Ngi pule shaphang jong ka ha ki jingthoh barim jong ki Grik. U Solo-mon u la phah wad sha India, ia ka ksiar, ki bniat hati bad ki maw

kordor. Ki traishnong kiba nyngkong jong kane ka ri ki la long ki riw-khlaw, bad ki la ju-thaw ia ki wait bad ki khnam jong ki da ki maw-shamok namar ba ki'm pat tip ba'n pyndonkam da u nar.

(*b*) Dei hamar pydong kane ka Them nga la iohi ba ka shyntur 35 ka dujok ka don, bad ka don ha syndah eh ka lynti. Hangne te u Khristan u la ong. Nga'n leh kumno ? Teng teng ka thyllieid ding bad ka tydem, lem bad ka phuliah ding bad ki jingsawa kiba sngew trim (kinekiei kiei ki'm shepting ia ka waitlam u Khristan kumba shepting u Apollyon mynshiwa) ki iamih bun eh kattakatta haduh ba u Khristan u la dei ba'n suh'la ka waitlam hapoh ka jingsop jong ka, bad ba'n pyndon kam da kawei pat ka atiar kaba la khot ka Jingduwai-Baroh ; kumta u la pyrta ha kaba nga la ioh sngew, Ah Trai, nga kyrpad ia me, to pyllait ia ka mynsim jong nga. Kumta u la nang iaid kham slem, la kumta kita ki thyllieid ding ki nang bud kumba'n j'liah ia u. U la iohsngew ruh ki jingud kiba sngew isynei bad ki ji igkyntur shane bad shawei, haduh ba haba dei-ba-dei u la sngew kumb i'n shu tar lyngkhot noh ia u, lane ba'n iuh ia u kumba iuh ia ka ktih ha lynti shnong. Ia kane ka jingkhymih kaba itrim bad ia kane ka jingsawa ba-sngew shyrkhei u la iohsngew bun mail : te haba u la poi sha kawei ka jaka ha kaba u mut ba shi kynhun ki ksuid kumba ki nang iawan ba'n iakynduh bad u. u la sangeh bad u la sydang ba'n puson ka bha ba u'n leh da kumno. Shiphang, u beh mut ba u'n leit kylla noh ; nangta pat u poi jingmut ba lehse u la lah lait shiteng kata ka Them.

(*c*) Baroh shi bnai U Kas-ius bad kiwei ki iashet pyni ia la ki 35 buit, bad ki la lah ba'n ring ia U Brutus ha ka jingshot buit jong ki. To la poi ' Ka Ides u nai Marts,' kaba long kadsan tarik jong uta u bnai. Bad uwei u nongkhan u la l-th ong ha U Kaisar ba u'n sumar bha ha kata ka sngi. Ka Kalpurnia, ka tnga U Kaisar. ka la pyr-shang ba'n khang ia u ba u'n ym leit Dorbar ha kata ka sngi. Ka ong ba ka la phohsniw kiba sniw ki jingphohsniw, bad ba ki jingih ba iphylla ki la paw baroh shi miet-baroh kine ki la long ki dak kynsha ha ka jingsngewthuh ka Kalpurnia. Ha koba nyngkong U Kaisar u la kohnguh ba'n sah ha ing ; hynrei haba wan U Desios, uwei na ki nongiashot, u la rkhie bein ia kat kano ka jingleh bieit, ba'n pynsangeh ia ka kam bah kam san ka shnong ka thaw tang namar ka jingphohsniw ka kynghei, te kumta U Kaisar u ong, ' Ai ka jainkup, nga'n leit kein,' haugta u la leit ha ing dorbar kaba ki khot Ka Kapitol.

Haba ki myntri, bad kiba khraw batri ki la shong, ka kam ka la sdang. Kine ki nongshet ki iawan hajan U Kaisar da kaba ki leh mynleh ai ki dyrkhat ha u, larie ia iapan jingsngewbha ei-ei. Kumta haba ki la wan hajan jong u baroh. U Kaska u dung ia u na ka rvndang. Hadien kata kita kiwei ki dung da ki shuri jong ki ; bad khadduh eh U Brutus ' uba ieit eh ' u rah la ka kti bad u dung ia u.

FIRST PAPER.—PART (A).

TRANSLATION FROM BURMESE INTO ENGLISH.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks

Translate *any two* of the following passages into English :—

(a) မိဖုရားကြီးသည်။ အရှင်မင်းကြီး။ ကိုယ်တော် ၃၅
သားတော်သည်ကား။ ဧကားမှပြကိုယ်လက်မတုန်မ
လှုပ်းနှုံချဲ့ရှုသာ။ ကြန်လက္ဏာ၍ကဲ့ခြင်းမဆင်။ သူခပ်
အိန်းမြင်၍။ ကြင်ဘွယ်ချစ်ဘွယ်သနားဘွယ်ရှိသော**အ
ဆင်းသဏ္ဍာန်**နှင့်ပြည့်ပုံပါသေး၏။ ရှေးသောအခါယါမ
 မင်းသားသည်။ တောင့်းနှုလျှက်ပင်။ မိမိစီးသောခြေနင်း
ကိုသာ။ စာရာဏာဒီပြည်ဝယ်။ ရာဇပလ္လင်ဦးကောင်ထိးပြို
အော်၍။ ကိုယ်စားမင်းပြုစေသော်။ မျှုးတော်မတ်းတော်
အများ။ မင်းသားကိုခန့်ငြားခြင်းဖြင့်။ ခြေနင်းစင်မျှသခင်
လုပ်လျှက်။ လက်အုပ်မြတ်ဇိုးကိုးကွယ်ကြကုန်၏ဟူ
သကဲ့သို့။ ဘုန်းတေဇုအာဏာသတင်းဖြင့်။ မင်းတကာ
တို့ဆက်မြတ်သာကိုယ်တော်ပည်ထင်ရှားရှိလျှက်။ သား
တော်တမိသကုမာရကိုထိးနှင်းနှင်းသည်ဟူ၍။ ဘယ်သူ
မလေးမလော်က်ပြဝံ့ပါအံ့နည်း။

(b) **မဟာဇနကမင်း။** ရွှာနိုးမြို့ငယ်များစွာတို့၏အခွ ၃၅
နိဆက်ရာဖြစ်၍၊ ဆင်၊ မြင်း၊ ရထား၊ ခြေသည်၊ သူဌေး။
သူကြွယ်၊ အမတ်ပုရောဟိတ်မင်းဆွေ၊ မင်းမျိုးတို့ဖြင့်ဖြ၁မ်း
သောမိဓိလာပြည်ကြီးစည်းဝိဝ်ဝယ်။ အသိုးများစွါထိုက်
သောအဝတ်တန်ဆာတို့ကိုလည်းကောင်း။ ဇိုလ်တရာအ

ချွန်ရှိသောရွှေလင်ပန်းကိုလည်းကောင်း။ စွန့်ပစ်၍။ အသိုး
မသိုက်သော၍သက်နံးကိုဝတ်လျက်။ အဘိုးမထိုက်သော
၍ေမြသပိတ်ကိုလွယ်ဖိုက်ကါထွက်လါခဲ့ရသည်မှာအ
ကြောင်းအသို့နည်း။ သင့်ကိုေဆွေတော်၊မျိုးေတာ်၊မှူးမတ်၊
ပြည်သူတို့သည်မနှစ်မြို့၍။ ပြည်တိုင်းကါးမှဟိမဝန္တာ
ဘောအရပ်သို့ပို့ဆောင်ထုတ်နှင်လိုက်ခြင်းေကြာင့်။ပြည်
သူတို့ကိုမလွန်နိုင်သဖြင့်။ ၍မြေခွက်ကိုနှစ်သက်ရေလ
သေလါဟုးေမး၏။

(င) မန္ဒီဖိဖုရားသံည်။ အရှင်မင်းကြီး။ အရှင်မင်းကြီး 35
အား�၍ေမြ ကြီးသည်လည်း ပဲ့တင်ထပ်မျှဖြစ်၏။ အရှင်မင်း
ကြီး၏းေကျးဇူးသိတင်းေကျာ်းစာခြင်းသည်လည်းအ္တထက်
နတ်ပြည်တိုင်အောင် နှံ့၍ဘာက်၏။ ထက်ဝန်းကျင်ေသာ
အရပ်မျက်နှင့်မှလည်းရ ပ်းအခါမဟုတ်ဘဲ။လျှပ်စစ်နွ
ယ်တို့သည်ပြိုးပြိုးပြက်ထွက်ကုန်၏။ ေဟာင်ပြိုးသာ
အသံ။ ကမ်းပါပြတ်၍ေချ့သို့ကျးေသာအသံကဲ့သို့လည်း
တေတာလုံးထင်ကုန်၏။ နာရဒနတ်၊ပဗ္ဗတနတ်၊ ဝိသခိုး
နတ်၊ ေသာမနတ်၊ယဇာမနတ်းဝိသာ လက္ခဏာနတ်၊၍နတ်မင်းတို့
သည်လည်းမိမိတို့ဖိမာန်တံခါးးဝင့်ရ ပ်ကုန်လျက်။ ေ၀သာ
န္တရာမင်းကြီးသည်မြတ်သောအလှူကိုလှူသတတ်ဟုဝမ်း
ေမြာ့ဝမ်းသာ။အနှေမ်ာ်ဒနှာပြိကြကုန်၏ဟုဆို ေလ၏။

First Paper. – Part (A).

TRANSLATION FROM MODERN ARMENIAN INTO ENGLISH.

Translate into English *two* out of the following three passages :—   70

1. Ալիբուն է այս Շուշան, վասն զի Հայրենասիրութեան և
ազատութեան հոգ կը բաւրէ: Գեզիցիկ է այդ Շուշան վասն զի կը
գբաւէ և կը տանի մեր հոգրւ և սիրուն այն ռասին, որ Նայոց կենւան
րութեմն դարն է, այն դաղամն, որ Նայոց թարջաց նաՀատակութեան
դաղամնէ, այն ռապստամանն, ոն ծագկայից եզաձ է ոչ թե անձրևաբեր
ամպերէն, այլ մեր ռուբբ և արիւնս բուրլֆ վկայից ցանեւալ և
ջբուեւալ ոպետոակ ոսկերնիքէն: Ալ սր զ ձայն նոյն ռաշան և ռաբատ
րոանն կը տանի, եբ կենդանութեան վոյրն կը տանի, և ով որ կենուռ.
Նութիւն կը ոիբէ, պեւռը է որ նոյն ռաշոտեն ծաղիչ մբ Հոտոտէ, այոսբ
վարբ, վագիւն Շւեշան, ապա մանիդալ ապա բայռռոան և այլն:

2. ժամանակը բարիքենբով լի Հեկեզոտ մի է որ կոևգայ շուտով
կր ոաշի և կերթայ: Ալնաքբ որ սբթուեն էն անոնք որ թագ և ժիբ
ին, այո Հոռանք ի մեզ էն շուսուլ երենց բաբիքնիբբ կը փնտւեն կը
դանին, կաւնեն և մշոնենապէ կ վայեթեն.

    իոկ անանձ որ ծոյլ են, ժամանակի սբժեռբ զբ ճանապլով,
կը քնանան: կուզագ ժամատկռ և կեբիդայ, ռակայն նռբա կը դաշեն
ոչ ինչ:

    Միբ օբերբ սբբ միչ Հազուռվ սբսւաձ են, անոնք ժամանակի
նզխաբնեբբ են, որբ իբարու եռեւեն կբոռշբին կեբիձան մեկ մբ եւս եբ
զռսոնենալս պայմանսս, սակայն այն օբեբսս մեզ սիբ սյարապ և անդսբձ
«Նգոսգաձ յամեբս և ժամանակի Հաշիւնիբբ կնզեսն կաբգսսբեռս
եմք. մեբ կենաց օբեբսս Հաջսխոոսբի մեզ: քանչ ի այն ծամեբբ միչ
գսբձեչս Համսբ տբսսաձ են և սզ անզսբձսսթեան.

3. Ալմնսսբեբ միչսցնեբ կսբանեն լոյրապաձեդ և կբթսսթիւնն
ամինսսն Մատգեսի և ամինսսն Համսբ պարտաստլչէ անիչ. կբ ջանան
սսսսզման եզանակնեբին կատսսբելս գսբձեն, կագխատին սատսսզզսկան
սսպբռչնեբ Հատսսատեւ և կանռտսսսբեշ, կբ ձձնին դպսբցսկան դենբեբն
քաննսռանիչ սսսսչզի վեծսկն բսբսսբեռ և բսբձեսյնեռ և գբեթե
ամեն տեգ, ամեն կբկեբնեբս միչ սբսսռակսն գսՀոբսսթիւննեբե
զեն խսսբսբիբ կբբթսսթեսմբ ժսզսվբզի վեծսկն բսբսսբեռոս Հսսսբ:
Մաբգիառսսբ կայ ս պխսի լինի, որ զբ կսբիննայ տեռնիչ թե սզզեբս
սպսգսն կսխսսսսձ է իրենց կբթսսթեան ոստեծանեն:

First Paper.—Part (A).

TRANSLATION FROM FRENCH INTO ENGLISH.

The figures in the margin indicate full marks.

Translate *two* of the following passages into English :—

(*a*) A son approche les villages furent deserts ; les habitants 35
fuyaient de tous côtes. Charles en usa alors comme à Copenhague ;
il fit afficher par-tout qu'il n'était venu que pour donner la paix ;
que tous ceux qui reviendraient chez eux, et qui payeraient les con-
tributions qu'il ordonnerait, serait traités comme ses propres sujets,
et les autres poursuivis sans quartier. Cette déclaration d'un prince,
qu'on savait n'avoir jamais manqué à sa parole, fit revenir en foule
tous ceux que la peur avait écartés. Il choisit son camp a Altran-
stadt, près de la campagne de Lutsen, champ de bataille fameux par
la victoire et par la mort de Gustave—Adolphe. Il alla voir la place
où ce grand homme avait été tué. Quand on l'eut conduit sur le
lieu : " J'ai tâché, dit-il, de vivre comme lui ; Dieu m'accordera peut-
être un jour une mort aussi glorieuse."

(*b*) Trois heures sonnèrent. Au troisième coup, Fantine se dres- 35
ta sur son séant, elle qui d'ordinaire pouvait à peine remuer dans
son lit ; elle joignit dans une sorte d'étreinte convulsive ses deux
mains décharnées et jaunes, et la religieuse entendit sortir de sa
poitrine un de ces soupirs profonds qui semblent soulever un accable-
ment. Puis Faustine se tourna et regarda la porte.
Personne n'entra ; la porte ne s'ouvrit point. Elle resta ainsi un
quart d'heure, l'oeil attaché sur la porte, immobile et comme reten-
ant son haleine. La soeur n'osait lui parler. L'ég lise sonna trois
heures un quart Fantine se laissa retomber sur l'oreiller.
Elle ne dit rien et se remit à faire des plis à son drap.

(*c*) Enfin, après douze jours d'une marche si pénible, pendant la- 35
quelle les Suédois avaient consommé le peu de biscuit qui leur restait,
cette armée exténuée de lassitude et de faim arrive sur les bords de
la Desna, dans l'endroit où Mazeppa avait marqué le rendez-vous ;
mais au lieu d'y trouver ce prince, on trouva un corps de Moscovites
qui avançait vers l'autre bord de la rivière. Le roi fut étonné ; mais
il résolut sur le champ de passer la Desna, et attaquer l'ennemi. Les
bords de cette rivière étaient si escarpés qu'on fut obligé de descendre
les soldats avec des cordes. Ils traversèrent la rivière selon leur
manière accutumée, les uns sur les radeaux faits à la hâte, les autres
à la nage. Le corps des Moscovites, qui arrivait dans ce temps-là
même, n'était que de huit mille hommes ; il ne résista pas long-
temps, et cet obstacle fut encore surmonté.

First Paper.—Part (B).

' Essay.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Write an essay on *one* of the following subjects:—   15
   - (*a*) Outdoor games, and their influence on character.
   - (*b*) Any religious festival you have witnessed or taken part in.
   - (*c*) Boy Scouts.

2. Write an essay on *one* of the following subjects, following the   15 general plan suggested :—

   (*a*) *Fairy tales :* a brief account of any you have read : the charm and value of fairy tales—they please the imagination—impart useful lessons—excite interest in men and things—but are harmful if read to the detriment of more serious studies.

   (*b*) *Companionship :* use of companions—to give help—to give advice—for the sake of amusement : result of companionship—seen in speech—in action ; 'as one lamp lights another, nor grows less, so nobleness enkindles nobleness' : the choice of companions, the keeping of companions.

ENGLISH.

SECOND PAPER.

Head Examiner :—REV. A. WARREN, M.A.

Examiners—

BABU JOGINDRANATH KANJILAL, M.A.
REV. FATHER P. T. GEEVERGESE, M.A.
BABU MANJUGOPAL BHATTACHARYYA, M.A.
  „ BIPINBIHARI DE, M.A.
MR. D. N. BOSE. B.A.
  „ S. CHOUDHURI, B.A. (*Cantab*).
BABU JITENDRANATH CHATTERJEE, M.A.
MR. H. C. CLARIDGE, B.A.
  „ W. ALEXANDER, M.A.
BABU HARAKANTA BASU, B.A.
  „ DWIJENDRANATH BHATTACHARYYA, M.A.
MR. J. N. CHAKRABARTI, M.A.
BABU ACHYUTAKUMAR DATTA, M.A.
  „ ANANDAKRISHNA SINGH, M.A.
  „ RAJENDRABHUSHAN BAKSI, M.A.
  „ NANIGOPAL BHATTACHARYYA, M.A.
  „ SATISCHANDRA SEN, M.A.
  „ ASWINIKUMAR GHOSH, M.A.
  „ PANCHANAN MITTER, M.A.
  „ JOGENDRAKUMAR SENGUPTA, M.A.
  „ CHINTAHARAN BANERJEE, M.A.
  „ JOTIRMAY BASU, M.A.
  „ NALINIMOHAN CHATTERJEE, M.A.
  „ NIRMALKUMAR SIDDHANTA, M.A.
  „ BRAJASUNDAR RAY, M.A.
  „ GIRIJAPRASANNA SANYAL, M.A.
REV. W. R. LEQUESNE.
  „ G. H. C. ANGUS, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Give in your own words the substance of *one* of the following :—

(*a*) Is life worth living ? Yes, so long   20
As there is wrong to right,
Wail of the weak against the strong,
Or tyranny to fight :
Long as there lingers gloom to chase,
Or streaming tear to dry,

One kindred woe, one sorrowing face
That smiles as we draw nigh;
Life is worth living still.
So long as in this ocean realm,
Victoria and her line
Retain the heritage of the helm
By loyalty divine: ,
So long as flashes English steel,
And English trumpets shrill,
He is dead already who doth not feel
Life is worth living still.

(b)   As we surpass our fathers' skill,   20
Our sons will shame our own :
A thousand things are hidden still
And not a hundred known.
And had some prophet spoken true
Of all we shall achieve,
The wonders were so wildly new,
That no man would believe.
Meanwhile, my brothers, work, and wield
The forces of to-day,
And plow the Present like a field,
And garner all you may !
You, what the cultured surface grows
Dispense with careful hands:
Deep under deep for over goes,
Heaven over heaven expands.

2.   Give in simple English the substance of any *two* of the follow-
ing passages :—

(a) Blessings on him that first invented sleep ! It wraps a man   20
all round like a cloak. It is a delicious moment certainly—that of
being well nestled in bed, and feeling that you shall drop gently to
sleep. The good is to come, not past : the limbs have been just
tired enough to render the remaining in one posture delightful : the
labour of the day is done. A gentle failure of the perceptions comes
creeping over one, the spirit of consciousness disengages itself more
and more, with slow degrees, like a mother detaching her hand from
that of her sleeping child ; the mind seems to have a balmy lid
closing over it, like the eye :—'tis closing : 'tis more closing ;—'tis
closed.

(b) The principal source of gratification derived by the European   20
traveller, on his sojourn in a country village in Hindustan, is the
diversity of new and attractive objects, which are continually pre-
sented to view in his excursions through the neighbouring hamlets.
The truth of this was never perhaps more fully developed to the
mind of the traveller, than on the following occasion. It was about
the hour of twelve or one, when we found ourselves in the midst of a
forest, on our return from shooting. Suddenly there appeared in
front of us a bevy of elephants, about fifty in number; they were
proceeding to join some of the Company's infantry regiments, having
halted in a plain of the forest, interspersed with lofty trees, the
higher leaves of which were of singular extension, and formed a com-
plete shelter from the sun's rays. Some of the elephants were of an
enormous size. They appeared perfectly tame, suffering me to ap-
proach close to them, while they were occupied in helping themselves
with their trunks to the leaves of trees, furnished by their keepers.
The appearance of so many of these colossal animals, feeding them-

selves, and tossing immense boughs in the air with their huge trunks, was a superb spectacle. Some were on the ground, apparently dozing ; others, busily engaged in cooling themselves by spirting water through their trunks over their bodies, in fondling one another, or beating off the flies with the flaps of their ears. The bright glare of the atmosphere ;—the wild grandeur displayed in the surrounding landscape ;—the novel group of men and animals before me : altogether conveyed to my mind an enviable sensation of delight

(c) Hannibal's strong sense of being the instrument of his coun- 20 try's gods to destroy their enemies haunted him by night and possessed him by day. In his sleep he fancied that the supreme god of his fathers had called him into the presence of all the gods at Carthage, who were sitting on their thrones in council. There he received a solemn charge to invade Italy ; and one of the heavenly council went with him, and with his army to guide him on his way. He went on, and his divine guide commanded him, ' See that thou look not behind thee.' But after a while, impatient of the restraint, he turned to look back, and there he beheld a huge and monstrous form, thick set all over with serpents ; wherever it moved, orchards and woods and houses fell crashing before it. He asked of his guide in wonder what was that monster form. The god answered, ' Thou seest the desolation of Italy : go on thy way, straight forward, and cast no look behind.' Thus, with no divided heart, and with an entire resignation of all personal and domestic enjoyments for ever, Hannibal went forth, at the age of twenty-seven, to do the work of his country's gods, and to redeem his early vow.

3. Expand the following :— 10

Four things come not back : the spoken word—the sped arrow—the past life—and the neglected opportunity.

4. Change the following into the indirect form of speech :— 6

I am a merchant from distant parts. On my journey last night I met with thieves, who stripped me of purse and all that I had ; and now I must seek my only friend in this town, a squire at the King's palace. He will be glad, I know, to lend me what I ask. Only set me down at the palace gates, and I shall soon be in a position to pay you handsomely for this morning's kindness. Tell me your name, friend, and where you live.

5. (a) Fill up the blanks in the following : -- 6

(i) You are much stranger—you used to be.
(ii) Wait here—1 return.
(iii) Many years have passed—I saw you last.
(iv) Either you—I mu t go to Bombay to meet him.

(b) Form a noun from *fluid*, an adjective from *sympathy*, a verb from *liquid*, and construct a short sentence to illustrate the meaning of each of the words formed by you.

6. Construct sentences containing examples of (a) a noun clause, 6 (b) an adjective clause, and (c) a cognate object.

7. (a) Parse the words italicized in the following :— 6

(i) Wait a *little*.
(ii) *Few* shall part where many meet.
(iii) *Why* are you late this morning ?

(b) Construct short sentences using an appropriate preposition after any *three* of the following :—acceptable, fertile, productive, enlist.

8. Write sentences containing any *four* of the following :— 6

In spite of : in accordance with ; all along ; by degrees ; all the same ; as well as ; once in a way ; at first hand.

MATHEMATICS.

Paper-setters—
{
HON. JUSTICE SIR ASUTOSH MUKERJEE, KT.,
C.S.I., M.A., D.L.
DR. SYAMADAS MUKERJEE, M.A., PH.D.
BABU INDUBHUSHAN BRAHMACHAR', M.A.
}

COMPULSORY PAPER.

Head Examiner—BABU INDUBHUSHAN BRAHMACHARI, M.A.,
B.L.

Examiners—
{
BABU SURENDRANATH SEN, M.A.
BABU SRIKANTHA KARMAKAR, M.A.
BABU NIBARANCHANDRA DASGUPTA, M.A.
BABU RADHABINOD PAL, M.A.
BABU PRABODHCHANDRA SENGUPTA, M.A.
BABU JITENDRAMOHAN PAL, M.A.
BABU BIBHUTIBHUSHAN MANDAL, M.SC.
BABU PRATIBHARANJAN RAY, M.SC.
BABU ANILENDRANATH GANGULI. M.A.
BABU SATISCHANDRA CHATTERJEE, M.A.
BABU ABHAYKALI GHOSH, M.A.
BABU AMARNATH PALIT, M.SC.
BABU NAGENDRANATH BASURAY, M.A.
BABU TARAKNATH BHATTACHARYYA, M.SC.
BABU GUNASINDHU SARDAR, M.SC.
BABU SASIMOHAN CHAKRABARTI, M.A.
BABU APARNACHARAN GANGULI. M.A.
MR. ABDUR RAHAMAN KHAN, M.A., B.T.
BABU SARATCHANDRA RAYCHAUDHURI, M.A.
MAULAVI MATLOOB AHMED KHAN CHOWDHURY,
   M.A.
BABU DEBENDRACHANDRA DATTA, M.SC.
BABU SARATCHANDRA RUDRA, M.A.
BABU ASUTOSH SARKAR, M.A.
BABU JYOTISCHANDRA MANDAL, M.A.
BABU GOPENDRANATH DAS, M.A.
BABU RAMENDRAMOHAN MAJUMDAR, M.SC.
BABU MEGHNAD SAHA. M.SC.
BABU BALORAM PAL, M.A.
BABU SAMBHUNATH BANERJEE, M.SC.
BABU KISORIMOHAN GUPTA, M.A.
BABU JATINDRACHANDRA CHAUDHURI, M.A.
BABU SRISCHANDRA GOSWAMI, M.A.
}

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

*In awarding marks neatness and accuracy of the diagrams will be
taken into account.*

Either,

1. (1) Multiply 390626 by 331779.   5

Or,

Find the G. C. M. of 78657 and 90275   5

(2) A reservoir contains 218,703 gallons of water. How many   5
cisterns, each holding 37 gallons, can be filled out of it, and how
many gallons will be left in it when they are all full ?

2. (1) Simplify   5

$$\frac{\frac{1}{2}+\frac{3}{4}+\frac{1}{2}\frac{5}{8}}{(\frac{5}{6}-\frac{5}{17})\times 1\frac{2}{13}}.$$

(2) Simplify $(1\cdot4-0\cdot362)\div(0\cdot31+0\cdot123-0\cdot0005)$.   5

(Express the result in decimals.)

Either.

3. (1) What will be the cost of paper 20 in. wide, at $3\frac{1}{2}d.$ a yard,   5
for the walls of a room 21 ft. long, 15 ft. wide, and 10 ft. high ?

Or,

Find the cost of 5 cwt. 2 qrs. 14 lb. of butter at £2. 5s. 6d. per cwt.   5

Either,

(2) What sum of money will amount to Rs. 1,532 4a. in three   5
years at $4\frac{1}{2}$ per cent. simple interest ?

Or,

A garrison of 420 have food enough to last them 35 days. After   5
5 days they are reinforced by 210 men, bringing no food with them.
How much longer will the food last ?

4. (1) Multiply   *Either,*   5

$$1-a+2a^2-3a^4 \text{ by } 3a-5+2a^2.$$

Or,

Divide $a+a^5+a^6 \text{ by } a^2+a+1.$ 5

(2) Find the H.C.F. of   *Either,*   5

$$x^3+4x^2-5 \text{ and } x^8-3x^3+2$$

Find the L.C.M. of   *Or,*   5

$$x^2-(a-c)x-ac \text{ and } x^2-(a+c)x+ac.$$

5. Solve   *Either,*

(1) $\dfrac{x+1}{2}+\dfrac{x+2}{3}+\dfrac{x+3}{5}=9$;   5

(2) $y+z=6,\ z+x=4,\ x+y=2.$ 5

Or,

A motorist does a journey of 80 miles in 6 hours. During the 10
first part of the journey he travels at 10 miles an hour, and during
the latter part at 18 miles an hour. How far does he travel at each
rate ?

6. Draw the graphs of $x+y=2$, and $x-y=0$, and find the co- 10
ordinates of their point of intersection.

Either,

7. Show that if two sides of a triangle are unequal, the greater 7
side has the greater angle opposite to it.

ABCD is a quadrilateral, with *AD* its greatest and *BC* its least 7
side. Prove that the angle at *C* is greater than the angle at *A*.

Or,

Show that two triangles are equal in every respect if two sides 7
and the included angle of one triangle are respectively equal to two
sides and the included angle of the other.

ABCDEF is a regular hexagon. Show that *ACE* is an equilateral 7
triangle.

Either,

8. Show that a straight line drawn from the centre of a circle 7
to bisect a chord which is not a diameter is at right angles to the
chord.

Show that two chords of a circle cannot bisect each other unless 7
both of them pass through the centre.

Or,

Show that the tangent at any point of a circle is at right angles 7
to the radius through the point.

Show that all chords parallel to the tangent at any point of a 7
circle are bisected by the radius through the point.

Either,

9. Construct a parallel to a given straight line through a given 12
point.

(Statement as well as justification of the constructions is re-
quired.)

Or,

Draw a straight line at right angles to a given straight line from 12
a given point without it.

(Statement as well as justification of the constructions is required.)

MATHEMATICS.

ADDITIONAL PAPER.

Head Examiner—BABU SARODAPRASAD DAS, M.A.

Examiners—
⎰ BABU MANORANJAN GUPTA, M.SC.
BABU MADHUSUDAN SARKAR, M.A.
BABU HARSHANATH SEN, M.SC.
BABU GIRINDRALAL MUKERJEE, M.A.
BABU GANGADAS MUKERJEE, M.SC.
BABU BIBHUTIBHUSHAN DATTA, M.SC.
BABU NEPALCHANDRA RAY, M.SC.
BABU KALIPRASAD BANERJEE, M.SC.
BABU SANATKUMAR CHATTOPADHYAYA, M.SC.
BABU DHIRENDRANATH GANGULI, M.A.
BABU BHOLANATH PAL, M.A.
BABU RAGHUPATI GHATAK, M.A.
BABU HARIPRASANNA BANERJEE, M.SC.
BABU BIRESWAR BAGCHI, M.A.
BABU SASINDRACHANDRA DHAR, M.SC.
BABU ASUTOSH PAL, M.SC.
BABU NIKHILRANJAN SEN, M.SC.
⎱ BABU AMULYARATAN SINHA, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

*In awarding marks neatness and accuracy of the diagrams will be
taken into account.*

1. (1) Find the square root of 6

1000014129.

(2) Find the dimensions of a tank which is 2·56 metres deep 6
and which holds 3,000 litres, the length of the tank being three times
the width.

Either,

2. Find the value of 8

$$\frac{1}{2} + \frac{2}{30} + \frac{3}{400} + \frac{4}{5000} + \dots,$$

correct to four places of decimals.

Or,

Find the value of $\dfrac{0·34567 \times 0·73456}{0·67345}$, correct to four places of 8
decimals.

3. (1) Solve $(x-7)(x-19)=64$.   6

(2) Find the square root of   6

$$49x^4 + 36y^4 + 109x^2y^2 - 79x^3y - 60xy^3.$$

Either,

4. (1) Show directly that the sum of n terms of an A.P. is equal   6
to n times half the sum of the first term and the last term.

Or,

Find directly the sum of n terms of the G.P.,   6

$$1 + \frac{1}{2} + \frac{1}{2^2} + \ldots$$

Either,

(2) If a be the first term of a G.P., l the nth term, and P the   6
product of the first n terms, show that

$$P = (al)^{\frac{n}{2}}.$$

Or,

Find the sum of n terms of the series   6

$$1^3 + 2^3 + 3^3 + \ldots.$$

5. Trace the graph of   10

$$y = x^2 - 4x + 5 \text{ from } x = 0 \text{ to } x = 4,$$

and find the least value of y.

6. Draw a circle of given radius to touch two intersecting straight   10
lines. Exhibit all the solutions
(Only traces of constructions are required.)

Either,

7. Show that if two triangles are equiangular their corresponding   12
sides are proportional.

Or,

Show that the internal bisector of the angle of a triangle divides   12
the opposite side internally in the ratio of the sides containing the
angle.

8. Show that the perpendiculars from the vertices of a triangle on   12
the opposite sides pass through a common point O, which is the centre
of the inscribed circle of the triangle whose vertices are the feet of the
perpendiculars.

9. In an obtuse-angled triangle show that the square on the side   12
opposite to the obtuse angle is greater than the sum of the squares
on the other two sides by twice the rectangle contained by one of them
and the projection on it of the other.

SANSKRIT.

Paper-setters—
{
Hon. Justice Sir Asutosh Mukerjee, Kt., C.S.I.. M.A., D.L.
Babu Bhagabatkumar Goswami, B.A.
Babu Asutosh Sastri, M.A.
Mahamahopadhyaya Kaliprasanna Bhattacharyya, M.A.
}

Compulsory Paper.

Head Examiner—Mahamahopadhyaya Kaliprasanna Bhattacharyya, M.A.

Examiners—
{
Babu Hemchandra Banerjee, M.A.
Babu Sasibhushan Bhattacharyya, M.A.
Babu Surendranath Bhattacharyya, M.A.
Babu Radhagobinda Basak, M.A.
Babu Sibaprasad Bhattacharyya, M.A.
Babu Mathuranath Mandal, M A.
Babu Rajanikanta Chatterjee, B.A.
Babu Lalitmohan Kar, Kabyatirtha, M.A.
Babu Girindranarayan Mallik, M.A.
Babu Ramsaran Ghosh, M.A.
Babu Mahendranath Bhattacharyya, M.A.
Babu Jatindranath Bhattacharyya, M.A.
Babu Hemchandra Ray, M.A
Babu Bireswar Basu, M.A.
Babu Sibadas Banerjee, M.A.
Babu Harilal Chatterjee, M.A.
Babu Dhireschandra Acharyya, M.A.
Babu Anantaprasad Banerjee, M.A.
Babu Bimalanath Bhattacharyya, M.A.
Pandit Janakinath Vidyaratna.
Pandit Debeschandra Vidyaratna.
Pandit Ramchandra Vidyabinod.
Pandit Manmathanath Vidyaratna.
Pandit Krishnapada Vidyaratna.
Babu Atulchandra Dasgupta, M.A.

To look over answer papers written in Devanagri character.

Babu Bijaykrishna Goswami.

To look over answer-papers written in Uriya character.

Mahamahopadhyaya Sadasiv Misra.
}

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English *any three* of the following extracts:—   15

(a) ततः सर्वे ते सारमेयास्तं शृगालमञ्जानन्तो यथाभीष्टदिशं
जग्मुः । चण्डरवोऽपि दूरतरं प्रदेशमासाद्य काननाभिमुखं प्रतस्थे ।

(b) अथ तद्वचनमाकर्ण्य प्रहृष्टमनास्तेनैव सह गुरुजनानुज्ञातः
शुभेऽहनि देशान्तरं प्रस्थितः । तत्र च धर्मबुद्धिप्रभावेण अमता पाप-
बुद्धिनापि प्रभूततरं वित्तमासादितम् ।

(c) भोः क्रूरानक ! मा त्वं ग्रामं गत्वा भूयोऽपि भागोद्वचनकष्ट-
भागी भूयाः । अरण्यं निर्विशङ्को सरकतघवृक्षानि श्रम्याग्राणि
भक्षयन् मया सह वस ।

(d) तद् यदि मम त्वं सुहृत् सत्यस्तदस्य राजापसदस्य कोऽपि
ध्योपायश्चिन्त्यताम्, यस्यानुष्ठानेन मे सन्ततिनाश्रदुःखमपसरति ।

2. (a) Translate *any two* of the following slokas into English:—   12

(1) दृष्ट्वा मुनिगणाः सर्वे पार्थिवाश्च महौजसः ।
पिवन्त इव चक्षुर्भिः पश्यन्ति स्म मुहुर्मुहुः ॥

(2) तस्मिंस्तु धरणी देवी बाहुभ्यां गृह्य मैथिलीम् ।
स्वागतेनाभिनन्द्येनामासने चोपवेश्यत् ॥

(3) अयं स समराश्लाघो भ्राता मे शुभलक्षणः ।
यदि पञ्चत्वमापन्नः प्राणैर्मे किं सुखेन वा ॥

(4) नेदृशं दृश्यते रूपं गतासूनां विशाम्पते ।
विषादं मा कृथा वीर समाप्तोऽयमरिन्दम ॥

(b) Expound the *samāsas* in *any three* of the following compound   3
words used in the above extracts:—

(1) महौजसः ; (2) समराश्लाघौ; (3) शुभलक्षणः ; (4) गतासूनाम् ;
(5) समाप्तः ।

(c) Is गृह्य in extract (2) rightly used ? If not, give the right   2
form.

(d) Change the voice of पश्यन्ति in sloka (1), showing the corres-   4.
ponding changes in the sloka.

(e) Parse सुखेन in extract (3).   1

3. Join in *sandhi* (सन्धि) *any three* of the following :— 3

(a) धावन् + चलितः ; (b) तत् + हितम्; (c) धीमन् + आगतः

(d) हरिः + रक्षति ।

4. यद्गाम्रोघं धनुरायम्य चित्रं विद्धं लच्यं पातितं वे पृथिव्यान् ।
कृष्णां हूतां प्रचलतां शत्रूराज्ञां तदा नाशंसे विजयाय शत्रुय ॥

(a) Give in English the story referred to in the above śloka. 3

(b) Do you find any grammatical anomaly in प्रचलताम् and शत्रू-राज्ञाम् ? If so, give the correct forms.

5. Give in English the full meaning of *any two* of the following :— 6

(a) श्वा यदि क्रियसे गन्ता स किं नाम्राल्पपानहम् ।

(b) नहि सुप्तस्य सिंहस्य प्रविशन्ति मुखे मृगाः ।

(c) उपदेश्रो हि मूर्खाणां प्रकोपाय न शान्तये ।

6. Form *two* Sanskrit sentences, each having *any one* of the following :— 4

(a) सरोवरे ; (b) ग्रहीतुम् ; (c) निर्लज्य ; (d) शोभन्ते ।

7. (a) Decline सखि (in the masculine gender) in the accusative case (द्वितीया विभक्ति), वधू (in the feminine gender) in the possessive case (षष्ठी विभक्ति), and मधु (in the neuter gender) in the nominative case (प्रथमा विभक्ति). 6

(b) Conjugate सद् in लट् (present tense) in the *third* person only ; पा in लोट् (imperative) in the *second* person only, and भू in लिट् (past tense) in the *first* person only. 6

8. Correct the errors, if any, in *any three* of the following :— 6

(a) प्रजासु सम्राजस्य महान् दया ।

(b) नरपुत्रादेश्रमिदम् ।

(c) तस्य मने सुखा नास्ति ।

(d) त्रीन् फलान् अनीयताम् ।

9. Translate *any five* of the following extracts into Sanskrit :— 25

(a) There is an excellent city, named Ratnapura, and in it there were two Brāhmanas, called Śiva and Mādhava.

(b) King Śaktideva, who was a worshipper of Vishnu, went one day to the garden of the gods, and there saw many celestial flowers.

(c) In Ujjayinī there lived long ago a king named Punyasena, and once on a time a powerful king came and attacked his kingdom.

(d) Thus reflecting, the sovereign went to the temple of Durgā, and there remained without food and drink for a long time.

(e) The king Mahīpāla mounted his elephant, and after roaming through numerous forests returned to his own island.

(f) At Pātaliputra there was a merchant of the name of Dhana-pālita. He travelled through different countries and amassed a large fortune.

(g) On the next day the ascetic went with his disciple to the hermitage of a yogī, and there on the side of a river he sat in devotion.

SANSKRIT.

ADDITIONAL PAPER.

Head Examiner—BABU ASUTOSH SASTRI.

Examiners—

BABU BHAGIRATHCHANDRA DAS, M.A.
BABU AKSHAYKUMAR BHATTACHARYYA, M.A.
BABU HARIPADA SENGUPTA, M.A.
BABU SATYENDRANATH SEN, M.A.
BABU ATULCHANDRA BANERJEE, M.A.
BABU BHABABIBHUTI BHATTACHARYYA, M.A.
BABU ADITYAKUMAR BHATTACHARYYA, M.A.
BABU BHOLANATH CHATTERJEE, M.A.
BABU BIPINBIHARI GUHA, M.A.
BABU SATISCHANDRA BHATTACHARYYA, M.A.
BABU PHANIBHUSHAN CHATTERJEE, M.A.
BABU NIRANJANPRASAD CHAKRABARTI, M.A.
BABU DEBKUMAR DATTA, M.A.
BABU DURGANATH SARKAR, M.A.
BABU HARIDAS SENGUPTA, M.A.
BABU TARAKANTA BHATTACHARYYA, M.A.
BABU BRAJENDRASUNDAR BANERJI, M.A.
BABU MADHABDAS CHAKRABARTI, M.A.
BABU DINESCHANDRA BHATTACHARYYA, M.A.

To look over answer-papers written in Deva-nagri character.

BABU GIRINDRAMOHAN MISRA, M.A.
BABU SARAJU JHA, M.A.

To look over answer-papers written in Uriya character.

BABU RADHAKRISHNA BASU, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *any one* of groups A, B, C :—   10

GROUP A.

आपदं प्राप्नुयात् स्वामी यस्य भृत्यस्य पश्यतः ।
प्राणेषु विद्यमानेषु स भृत्यो नरकं व्रजेत् ॥
स्वाम्यर्थे यस्त्यजेत् प्राणान् भृत्यो भक्तिसमन्वितः ।
स परं पद्ममाप्नोति जरामरणवर्जितम् ॥

GROUP B.

अलब्धं चैव लौप्सेत लब्धं रचेईद्वद्या ।
रचितं वद्धगेत् सम्यग् वृद्धं तीर्घेषु निचिपेत् ॥
अज्ञनस्य चयं हृष्ट वहमोक्ष च सङ्ग्रयं ।
अबन्ध्यं दिवसं कुर्य्याद्दु दानाध्ययनकम्मेभिः ॥

GROUP C.

ऊचुः परस्परं चेदं सर्व्वं एव समाहिताः ।
उभौ रामस्य सदृशौ विम्वाद् विम्विवोद्गतौ ॥
जटिलौ यदि न स्यातां न वल्कलधरौ यदि ।
विशेषं नाधिगच्छामो गायतो राघवस्य च ॥

2. (a) Disjoin the *sandhi* either in सर्व्वं एव or in गायतो राघवस्य च 2
in group C.

(b) Account for the case-ending *either* in भूत्य स्य पश्यतः or in 2
प्राणेषु विद्यमानेषु in group A.

3. *Either*, Explain fully in English the allusion in— 6

यदाग्राघं कर्णदुर्य्योधनाभ्यां बुद्धं कृतां निग्रहे कोश्रवस्य
तं चात्मनं बहुधा दर्शयानं तत्रा नाशंसे विजयाय सङ्ग्रय ॥

Or, Give in English the story why and how the monkey chief fetched the Gandhamādana hill.

4. Translate into English *any three* of the following extracts:— 30

A.

अन्यस्मिन्नह्नि राजा प्रातःकृत्यानि समाप्य सभां प्राप ।
पण्डिताः कवयो गायका अन्ये य समाजग्मुः । कालिदासमेकमनागतं
वीच्य राजा स्वसेवकमेकं तदाह्वानय प्रेषयामास । स गत्वा कालिदासं
नत्वा प्राह—"कवीन्द्र त्वामाह्वयति भोजनरेन्द्रः" इति ।

B.

ततो राजा माघं भृतं नर्म्मदातीरं नीत्वा यथाविधि संस्कार-
मकरोत् । तत्र च माघपत्नी वह्नौ प्रविष्टा । तयोस्न पुत्रवत् सर्व्वं चक्रे
भोजः । ततो दिवं गते माघे राजा कालिदप्रक्रियोत्णे कृष्णोऽभूद्
दिने दिने ।

C.

कदाचिद् देवसभायां सच्चेन्द्रो नारदं प्राप्त—"मुने, इदानीं
भूलोके का नाम वार्त्ता" इति । ततो नारदः प्राह—"सुरनाथ, न
किमपि श्राश्चर्य्यम् । किन्तु धारानगरवास्तौ श्रीभोज भूपालो रोग-
पीडितः । श्रत्यन्तमस्वस्थौ वर्त्तते । स तथ्य रोगः केनापि न निवा-
रितः" । इति ।

D.

राज्ञा उक्तं—"भो मन्त्रिन्, यदि मम त्वं प्रियस्तर्हि श्रमुं
श्चारदानन्दं मारय" ! मन्त्रिणापि तथास्तु इत्युक्ता लोकानां पुरतो
धृतः श्चारदानन्दो बद्घ्स । तस्मिन्नवसरे श्चारदानन्देनोक्तम्—श्रहो
राजा न कस्यापि प्रियो भवतीति लोकोक्तिः सत्या ।

E.

तस्मिन् श्रवसरे राजमन्दिरे राजपुत्रः केनापि मारित इति
मस्चान् कोलाहलो जातः । राज्ञापि स्वपुत्रानुसन्धानाय सर्वे राजपुरुषाः
प्रेषिताः । ततस्ते यावद् विपणिमध्ये विलोकयन्ति, तावद् श्राभरण-
हस्तो देवदत्तस्तत्रो दृष्टः ।

F.

तच्छ्रुत्वा राजा स्वमनसि श्रचिन्तयत्—श्रसौ श्रनृतं वदति ।
श्रस्तु तथापि श्रयौ वर्त्तते । सर्व्वाणाच मनोरथः पूरणीयः । इति
विचार्य्य नगरमेकं कारयित्वा तस्मिन्नगरे तमभिषिच्च । पञ्चाश्चद्
राजान्, योगानां सहस्रं तस्मै ददौ । चम्पिडकापुरमिति च नगरस्य
नाम कृतम् । ॰

5. Translate into Sanskrit *any five* of the following :—   25
(a) By order of his eldest brother, Lakṣmaṇa abandoned Sītā in
a forest infested by wild animals.
(b) A junior must not disobey the order of his senior, even if the
order is disagreeable.
(c) King Hariśchandra gave everything to a Brāhmin. For this
he went to heaven after death.
(d) Truthfulness is the highest virtue ; be always truthful.
(e) All my desires are fulfilled ; God bless you, sir.
(f) King Bhagīratha pleased Brāhma by his austerities ; ' Gangā '
came down from heaven.
(g) Prayers were offered in every quarter of the city for the life
of the great king.
(h) All was in vain ; the emperor died in the evening.
(i) The queen burnt herself on the funeral pyre of her beloved
husband.

6. Make necessary corrections in *any five* of the following:—   10

    (a) इयं नर्त्तकौ सुगायकौ ।

    (b) न साधुसीरां विभेति ।

    (c) बहुपन्या अयं ग्रामः ।

    (d) राजा भूरि धनमददत् ।

    (e) अलंघ्यो विष्णपत्युनियमः ।

    (f) अत्र सर्व्वे लक्ष्मीमन्तः ।

    (g) वर्द्धन्तं रोगं न उपेक्षेत ।

    (h) उमेऽत्र नद्यौ मिलिते ।

    (i) गृहाणामुपरिषु धूमरेखाः ।

    (j) मातरद्य वृष्टिर्बभूत्र ।

7. Explain and illustrate fully the use of **क्तवतु** *or* **क्त** .   5

8. Shorten *any two* of the following sentences by the use of suit-   4
able **तद्धितान्त** words for the underlined:—

    (a) अयं घटो मृदा विकारः ।
                    <u>   </u>

    (b) अयं राजा सर्व्वेभूमंरध्वीश्वरः ।
                 <u>   </u>

    (c) यथा कदम्बं भर्वात तथा इयं पृथिवी ।
                    <u>   </u>

    (d) इदं वस्त्रं कषायेण रक्तम् ।
                 <u>   </u>

9. Distinguish the uses of:—   6

    Either, विंशतिः and विंशतमः;

    Or, महाराजः and महाराजा .

PALI.

Paper-setters—
{ M.M. Dr. Satischandra Vidyabhushan, M.A., Ph.D.
Babu Sailendranath Mitra, M.A.
,,   Nilmani Chakrabarti, M.A.

Head Examiner—Mahamahopadhyaya Dr. Satischandra Vidyabhushan, M.A., Ph.D

Compulsory Paper.

Examiners—
{ Babu Amulyacharan Vidyabhushan.
,,   Mahendrakumar Ghosh, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *any five* of the following :—   15

(a) So ' sādhû ' ti taṁ passena nipajjāpetvā ' ko jānāti kiṁ p' esa karissatī ' ti cintetvā yathā mukhaṁ pidahituṁ na *sakkoti* tathā tassa adharotthe ca uttarotthe ca daṇḍakaṁ thapetvā mukhaṁ pavisitvā atthikotiṁ tuṇḍena pahari.

(b) Sve uposatho, tumhe tayo pi janā sīlaṁ samādiyitvā uposathikā hotha, sīl puṭitthāya innadānaṁ mahapphalaṁ hoti tasmā *yācake* sampatte tumhehi khāditabbāhārato datvā khādeyyātha.

(c) So mahājane sannipatite nāvāya dhure thatvā pakkhe vidhūnitvā madhurassaraṁ niccharetvā nacci. Manussā taṁ disvā somanassajātā ' etaṁ ayyo sobhaggapattaṁ susikkhitasākuṇarājānaṁ *amhākaṁ* dethā ' ti ūhaṁsu.

(d) Ath' ekacce abhiruhiṁsu ekacce vāladhiṁ gaṇhiṁsu ekacce añjaliṁ paggahetvā atthaṁsu yeva. Bodhisatto *antamaso* añjaliṁ paggahetvā thite sabbe pi te addhateyyavasate vāṇije attano ānubhāvena janapadaṁ netvā sakasakatthānesu patitthāpetvā attano vasanatthānaṁ agamāsi.

(e) So hatthena tassa sarīraṁ parimadditvā ' nāyaṁ mangalahatthī bhavitum anucchaviko, pacchāvāmanakadhātuko esa, *etaṁ* hi mātā vijāyamānā aṁsena paticchituṁ nāsakkhi, tasmā bhūmiyaṁ patitvā pacchimapādehi vāmanakadhātuko jāto' ti ūha.

(f) Taṁ khaṇaṁ yeva pācinalokadhātuto paripuṇṇaṁ candamaṇḍalaṁ uṭṭhahi. Brāhmaṇo nakkhattaṁ olokento ' dhanavassāpanaka-nakkhattayogo laddho, kiṁ mё *dukkhena* anubhūtenā, mantaṁ parivattetvā rdtanavassaṁ vassāpetvā corānaṁ dhanaṁ datvā yathāsukhaṁ gamissāmī ' ti cintesi.

(g) Rājā sāsanaṁ sutvā va ' coraṁ gaṇhissāmā ' ti nikkhami. So ekaṁ bheritalaṁ pahari, caturangini senā *parivāresi*. Rañño avattharaṇabhāvaṁ ñatvā dadhighataṁ vissajjesi, mahānadī pavatti, mahājāno dadhiṁhi osīditvā nikkhamituṁ nāsakkhi.

2. (a) Parse *any three* of the italicized words in the above extracts :—   3

(b) Name and expound the *samāsas* in *any two* of the following :—   3
addhateyyasate, pacchāvāmanakadhātuko, and *pācinalokadhātuto.*

(c) Conjugate *any three* of the following in the 3rd person singular 3
only :—

>*han* —in the present.
>*pat* —in the future.
>*pad* —in the aorist.
>*muc*—in the imperative,

3. Give in English the purport of *either* of the following couplets : — 5

(a) Nâccanta nikatipañño nikatyā sukham edhati,
ārādhe nikatipañño bako kakkatakā-m-iva.

(b) Aniccā vata sankhārā uppādavayadhammino,
uppajjitvā nirujjhanti, tesam vūpasamo sukho.

4. Give in simple English the story referred to in *either* of the 7
following stanzas : —

(a) Yato sarāmi attānam yato patto 'smi viññutam
nâbhijānāmi samcicca ekapānam pi himsitam,
etena saccavajjena sotthim nāvā nivattatu.

(b) Āsimseth' eva puriso, na nibbindeyya pandito
passāmi vo 'ham attānam, yathā icchim tathā ahū.

5. Translate into English *any two* of the following extracts :— 10

(a) Anāvaranañānam tam pesesi dipaduttamo
addasa virajo Satthā Lankādīpavaruttamam
Sudesam utusampannam subhikkham ratanākaram
pubbabuddhamanucinnam ariyagañasevitam.
Lankādīpavaram disvā sukhettam ariyālayam
ñatvā kālam akālañ ca vicintesi anuggahā.

(b) Agyāgāre ahināgam damesi purisuttame
disvā acchariyam sabbe nimantimsu Tathāgatam :
' Hemanta-cātumāsamhi idha vihara Gotama,
mayam tam niccabhattena sadā upatthahāmase.'
Uruvelāyam hemante vasamāno Tathāgato
jatile sapārisajje vinesi purisāsabho.

(*) Atha rakkhasā yakkhaganā ca dutthā
dīpam imam Lankāciranivāsitam
dadāmi sabbam Giridīpaporānam
vasantu sabbe supajā anighā.
Imañca Lankātalam mānusānam
porānakappatthitavutthavāsam,
vasantu Lankātale mānusā bahū
pubbe va Ojāvaramandasādisam.

Either,

6. Describe Buddha's visit to Ceylon. 7

Or,

Give the substance of the following couplets in English :—

>Khanti ca sovacassatā samanānañca dassanam
>kālena dhammasākacchā etam mangalamuttamam.
>Phutthassa lokadhammehi cittam yassa na kampati
>asokam virajam khemam etam mangalamuttamam.

7. (a) Analyse the *sandhis* in *any four* of the following :—*agyāgāre,* 4
purisāsabho, gunehupeto, svāham, and *sabbhireva.*
(b) Decline fully *any two :—aggi, naāhu, utu.* 6

(c) How are causative verbs formed in Pāli? Give the 3rd 　6
person singular causative forms of *any four* of the following roots:—
su, kar, khād, gam, and *pac*.

8.　Correct the errors in *any three* of the following:—　　6

   (a) Antevāsikena upajjhāyassa pāde siraṁ vanditabbo.
   (b) Coro gāḷhena kaccham bandhitvā palāyiṁ.
   (c) Nâhaṁ ācariyam ārocemi.
   (d) Pitari accaye sabbamova dhanaṁ bhikkhave dassāmi.
   (e) Alaṁ bho paṭivādaṁ, ācariyena khamāpeyya.

9.　Translate into Pāli *three* from Group A, and *two* from Group B :— 　25

A.

   (a) He shows great eagerness to learn.
   (b) The diamond is the most brilliant of all jewels.
   (c) Wicked men are always miserable.
   (d) Evil company is ever to be avoided.
   (e) The king was seated on a throne.

B.

   (a) It became darker; he thought that he would have to spend
the night in the street, and tears rolled down his cheeks.
   (b) At last he began to cry aloud. A kind man who happened
to pass by that way stopped and asked the cause of the child's
distress.
   (c) The boy felt a great deal relieved and told him everything.
The kind man pitied him and brought him safe home.

PĀLI.

Additional Paper.

*Examiner—*Babu Gokuldas De, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1.　Translate into English *any one* of the following extracts:— 　10
   (a) Tato sakuṇaganā Himavantappadese ekasmiṁ piṭṭhipāsāṇe
sannipatitvā 'manussesu rājā paññāyati, tathā catuppadesu c'eva
macchesu ca; amhākaṁ pan'antare rājā nāma n'atthi, appatissavāso
nāma na vattati, amhākaṁpi rājānaṁ laddhuṁ vattati; ekaṁ rājat-
thāne thapetabbayuttakaṁ jānāthā' ti; te tādisaṁ sakuṇaṁ olokaya-
mānā ekaṁ ulūkaṁ rocetvā 'ayaṁ no ruccati' ti āhaṁsu. Ah'eko
sakuno sabbesaṁ ajjhāsayagahaṇatthaṁ tikkhattuṁ sāvesi. Tassa
sāventassa dve sāvanā adhivāsetvā tatiyasāvanāya eko kāko utthāya
'tiṭṭha tāva, etassa imasmiṁ rājābhisekakāle evarūpaṁ mukhaṁ,
kuddhassa kidisaṁ bhavissatī ti, iminā hi kuddhena olokitā mayaṁ
tattakapāle pakkhittatilā viya tatthạ tatth'eva bhijjissāma.'

(b) So Sākhaṁ pakkosāpetvā āha ' samma bahū migā nassanti, ekaṁsena maritabbe sati ito paṭṭhāya mā kaṇḍena mige vijjhantu, dhammagaṇḍikaṭṭhāno migānaṁ vāro hotu, ekadivasaṁ tava parisāya vāro pāpuṇātu, ekadivasaṁ mama parisāya vāro pāpuṇātu; vārappatto migo gantvā dhammagaṇḍikāya gīvaṁ ṭhapetvā nipajjatu, eyaṁ sante migā vaṇitā na bhavissanti.' So ' sādhū' ti sampaṭicchi. Tato paṭṭhāya vārappatto migo gantvā dhammagaṇḍikāya gīvaṁ ṭhapetvā nipajjati. Bhattakārako āgantvā tattha nipannakaṁ eva gahetvā gacchati. Ath'ekadivasaṁ Sākhamigassa parisāya ekissā gabbhinīmigiyā vāro pāpuṇi. Sā Sākhaṁ upasaṅkamitvā ' sāmi ahaṁpi gabbhinī, puttakaṁ vijāyitvā dve janā vūraṁ gamissāma, mayhaṁ vāraṁ atikkamehi ti āha.

2. (a) Analyse *any two* of the following compounds:—' catup- 2 padesu,' ' pakkhittatilā,' and ' vārappatto.'

(b) Give the roots of *any two* of the following words, and conju- 3 gate them in the present (vattamānā) in all the numbers in the first person:—' pakkhitta,' ' gahetvā,' ' sante,' and ' vijāyitvā.'

Either,

(c) Give the main incidents in the life of Buddha from his 5 approaching the Bodhi tree to his first visit to Ceylon.

Or,

Narrate the story alluded to in the following couplet :—

Evañce sattē jāneyyuṁ dukkhāyaṁ jātisambhavo na pāṇo pāṇinaṁ haññe pāṇaghātī hi socati.

3. (a) Frame short sentences in Pāli to illustrate the use of *any* 6 *three* of the following : —

    (i) *Kattari tatiyā* (third case-ending used with the agent).
    (ii) *Tumatthe catutthī* (fourth case-ending in signifying the meaning of the suffix *tuṁ*).
    (iii) *Hetuatthe pañcamī* (fifth case-ending denoting cause).
    (iv) *Niddhāraṇe chaṭṭhī* (sixth case-ending denoting speci- fication).

(b) Give the ablative and locative forms of *any three* of the 6 following bases:—' Brahmā,' ' Attā,' ' Sakhā,' and ' Rājā.'

(c) How are perfect participles formed in Pāli ? Give the perfect 4 participles of *any three* of the following roots: —kar, gam, vac, dā, and car.

(d) How many kinds of compounds are there in Pāli ? Name 6 them, and give an example of each of them.

(e) Correct *any one* of the following:— 3

    (i) Tāya rājāya dhītā ativiyā piyā ahosi.
    (ii) Sve ahaṁ tassa saha tattha agamāsi.

4. Translate into Pāli *any four* of the following :— 25

(a) All the inhabitants of the kingdom went together to the gate of the palace and made a loud tumult.

(b) The king standing near the window asked, ' Why are these men shouting so loudly ?

(c) The brahmins on the next day bathed early in the morning, and going there stood at the eastern gate.

(d) My lord, my father is dead, and my mother is ill. So I must go quickly and see her.

(e) ' Do you know what has happened to your mother during your absence from home ?' ' No sir, I do not know.'

5. Translate into English *any two* of the following extracts :—   30

(*a*) Rājā pi'ssa dhanavassaṁ vassanto viya bahuṁ dhanaṁ mahantaṁ ca yasaṁ adāsi. Evaṁ Bodhisatte tattha vasante ' Asadisakumāro Bārānasiyaṁ n'atthī ' ti satta rājāno āgantvā Bārānasiṁ parivāretvā ' rajjaṁ vā detu yuddhaṁ vā ' ti rañño paṇṇaṁ pesesuṁ. Rājā maraṇabhayabhīto ' kahaṁ me bhātā vasatī ' ti pucchitvā ' ekaṁ sāmantarājānaṁ upatthahati ' ti sutvā '₊mama bhātike anāgacchante mayhaṁ jīvitaṁ n'atthi, gacchatha tassa mama va₊anena pāde vanditvā khamāpetvā gaṇhitvā āgacchathā ' ti dūte pesesi. Te gantvā Bodhisattassa taṁ pavattiṁ ārocesuṁ.

(*b*) Rañño pana Paṇḍavo nāma maṅgalasso tassa Giridanto nāma assabandho, so khañjo ahosi. Asso mukharajjuke gahetvā taṁ purato purato gacchantaṁ disvā 'maṁ eso sikkhāpetī ' ti saññāya tassa anusikkhanto khañjo ahosi. Tassa khañjabhāvaṁ rañño ārocesuṁ. Rājā vejje pesesi. Te gantvā assassa sarīre rogaṁ apassantā ' rogaṁ assa na passāmā ' ti rañño kathayiṁsu Rājā Bodhisattaṁ pesesi : ' gaccha vayassa, ettha kāranaṁ jānāhi ' ti. So gantvā khañjassabandhasaṁsaggena tassa khanjabhūtabhāvaṁ ñatvā rañño taṁ atthaṁ ārocetvā ' saṁsaggadosena nāma evaṁ hotī ' ti dassento pathemuṁ gāthaṁ āha.

(*c*) Bodhisatto tena saddhiṁ ₊paṭisanthāraṁ katvā ' kiṁ māṇava rājā dhammiko ' ti pucchi. ' Āma bhante rājā dhammiko, bhariyā pan'assa kālakatā, so tassā sarīraṁ doniyaṁ pakkhipāpetvā vippalaₚamāno nipanno, ajj'assa sattamo divaso, kissa tumhe rājānaṁ evarūpā dukkhā na mocetha ; yuttaṁ nu kho tamhādisesu sīlavantesu vijjamānesu rañño evarūpaṁ dukkhaṁ anubhavituṁ ' ti. ' Na kho ahaṁ mānava rājānaṁ jānāmi,₊sace pana so āgantvā maṁ puccheyya ahaṁ ev'assa tassā nibbattatthānaṁ ācikkhitvā rañño santike yeva taṁ kathāpeyyan ' ti. ' Tena hi bhante yāva rājānaṁ ānemi tāva idh'eva nisīdatha.'

ARABIC.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English the first and *either* the second *or* the third of the following extracts :—

A.   12

اذا لم اتم يومــــاً لحقـــّـلك بالشـكر

فقل لى لمن اعدـدت فظمى مع النثر

لقـــد جدت لى قبل الســـوال بانعم

اتتفنـــن بلا مطـــل لديك و لا عذر

فما لى لا اعطـــى ثنـــاوك حقه

و اثنى على علياك فى السرو الجهر

ساشكـــرما اوليتنـــى من صنـــائع

يخف لها فمى و ان اثقلـــت ظهرى

B. 13

فلما بلغ الحين الذى اراد الله عز و جل ان ينفخ في فيه.
الروح قال للملائكة اذا نفخت فيه من روحى فاسجدوا له . فلما
نفخ فيه الروح فدخل الروح فى رأسه عطس - فقالت الملائكة
قل الحمد لله فقال الحمد لله فقال الله عز و جل رحمك
ربك - فلما دخل الروح فى عينيه نظر الى ثمار الجنة - فلما
دخل الروح فى جوفه اشتهى الطعام فوثب قبل ان تبلغ
الروح رجليه عجلان الى ثمار الجنة - .فذلك حين يقول خلق
الانسان من عجل *

C. 13

ثم انهم اعطونى البضائع فوجدت اسمى مكتوبا عليها - و لم
ينقص منها شىء فقتحتها و اخرجت منها شيئا نفيسا غالى
الثمن - و حملته معى بحرية المركب - و طلعت به الى الملك
على سبيل الهدية - و اعلمت الملك بان هذه المركب التى
كنت فيها اذ اخبرته ان بضاعتى وصلت الى بالتمام و الكمال
و ان هذه الهدية منها . فتعجب الملك من ذلك الامر غاية

العجب - و ظهرله صدقى فى جميع ما قلته - و قد احبنى

محبة شديدة و اكرمنى اكراما زائدا و وهب لى شيئا كثيرا

فى نظير هديتى. *

2. Answer *any four* of the following :—

   (a) Vocalize fully extract A, question 1.   5

   (b) Account for the اعراب of the words underlined above.   5

   (e) Note, *with examples*, the use of each of the following ;— صار   5
كانَّ.

   (d) Decline افتعال of the root اخذ in the form المضارع المعروف   5
Add diacritical points.

   (e) Write the تعليل of :— قل - دام - يجد.   5

   (f) Explain the modes of the اعراب of :— الجمع المونث السالم   5
المثنى,

   (g) Construct five examples of الجملة الاسمية, each consisting of   5
more than two words.

3. Give in your own words *one* of the following :—   15
   Either, Story of Sindbad's second voyage.
   Or, Story of the Peacock and his consort.

4. Analyse, using the technical terms of Arabic grammar :—   7

فلما وصلت الارض اسرعت و فككت الرباط من رجليه و انا

خائف منه .

5. Answer *any one* of the following : —
   (a) Explain the following :—   8

لا تبتئس و انس الهموم جميعها

ان الهموم تزيل لب الحازم

لا ينفع التدبير عبداً ماجزا

فاتركه تسلم فى نعيم دائم

   (b) Write with vowel-signs the opposite numbers of :— ماء - فكاز   8
اناء - طاوس - مجان يف - اشبل - شكال - جرار.

   (c) Give in Arabic the substance of the Prophet's letter to   8
Khalid ibn al-Walid regarding the conversion of Bani 'l-Harith.

6. Translate into Arabic *any ten* of the following sentences :— 25

Take the book in your hand.
He went home at twelve o'clock.
What is in your right hand ?
The poor man has thrown it away.
If we look at the sun for a long time we shall become blind.
What is the price of that knife ?
The price of that is five rupees.
The sun in the evening goes down in the west.
The stream issued out of the valley.
Virtuous men are always respected.
He is the tallest man in the room.
He is more learned than his brother.
To get there in time is impossible.
How will you finish your journey ?
They wished to avoid travelling in the heat of the day.

ARABIC.

●

ADDITIONAL PAPER.

Examiner—MAULAVI MD. IRFAN. M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English :— 10

فلما وصل اليه ضحك النجار فى وجهه و قال بلسان فصيح
ايها الملك صاحب البأس الطويل اسعد الله مسارك و مسعاك
و زاد فى شجاعتك و قواك اجرنى مما دهانى و بشره رمانى
لانى ما وجدت لى نصيرا غيرك ثم ان النجار وقف بين يدى
الاسد و بكى و اشتكى - فلما سمع الشبل بكاءه و شكواه قال له
اجرتك مما تخشاه فمن الذى قد ظلمك و ما تكون ايها
الوحش الذى ما رأيت عمرى مثلك و لا احسن صورة و افصح
لسانا منك فما شأنك *

2. (a) Parse the underlined words. 6

(b) Give مضارع معروف of وقف in the third person singular and 4
explain the form it assumes.

3. Translate into English *any one* of the following: —

A.

18

رُوى ان غديرا كان عنده عشب و كان فيه بطنان و كان فى
الغدير سلحفاة بينها و بين البطتين مودة و صداقة فاتفق ان غيض
ذلك الماء فجاءت البطتان لوداع السلحفاة و قالتا السلام
عليك فاننا ذاهبتان عن هذا المكان لاجل نقصان الماء عنه
فقالت انما يبين نقصان الماء على مثلى التى كانى السفينة
لا اقدر على العيش الا بالماء فاما انتما فتقدران على · العيش
حيثما كنتما فاذهبا بى معكما - قالتا نعم قالت كيف السبيل
الى حملى - قالتا نأخذ بطَرَفَىّ عود و تقبضين بفيك على
وسطه و نطير بك فى الجو - و اياك اذا سمعت الناس
يتكلمون ان تنطقى - · ثم اخذتاها فطارتا بها فى الجو فقال
الناس عجب - سلحفاة بين بطنين قد حملتاها - فلما سمعت
ذلك قالت فقأ الله اعينكم ايها الناس - فلما فتحت فاها
بالنطق وقعت على الارض فماتت *

B.

18

قيل ان قردا رأى نجارا يشق خشبة و هو راكب عليها -
و كلما شق منها ذراعا ادخل فيها وتدا - فوقف ينظر اليه و قد
اعجبه ذلك - ثم ان النجار ذهب لبعض حاجته - فقام القرد
و تكلف ما ليس من شأنه فركب انخشبة و جعل وجهه نحو
الوتد و ظهره نحو الخشبة فتدلى ذنبه فى الشق - و نزع
الوتد - فلزم الشق عليه فكاد يغشى عليه من الالم - ثم ان
النجار جاء فوجده على تلك الحالة - فاقبل عليه يضربه فكان

ما لقى من الذجار من الضرب اشد عليه مما اصابه من
الخشبة *

على الانسان ان يفكر فى الامر قبل الدخول فيه وان
لا يختار امرا ليس له فيه نفع * .

4. Translate into English *any three* of the following :— 12

(a) قال لقمان ان الدنيا بحر عريض قد هلك فيه الاولون
و الآخرون فاجعل سفينتلك تقوى الله و زادك العمل الصالح
فان نجوت فبرحمة الله و ان هلكت فبذنوبك *

(b) قال رجل لابى الدرداء ما لنا نكره الموت فقال لانكم
اخربتم أخرتكم و عمرتم دنياكم فكرهتم ان تنتقلوا من العمران .
الى الخراب * .

(c) ثلثة لا يستخفّ بهم - السلطان و العالم و الصديق - فمن
استخف بالسلطان ذهبت دنياه - و من استخف بالصديق
ذهبت مودته - و من استخف بالعالم ذهب دينه *

(d) جد بما تجد - بكاء المرء من خشية الله قرة العين - بلاء
الانسان من اللسان - زينة الباطن خير من زينة الظاهر - لا دين
لمن لا مروءة له - حسن الادب يستر قبح للنسب *

(e) اذا ذهب الحياء حلّ البلاء .. بعض الكلام اقطع من
الحسام - نصرة الحق شرف - من حسنت خصاله طاب
وصاله - من حفر حفيرا لاخيه كان حتفه فيه - كلام المرء بيان
فضله و ترجمان عقله *

5. Answer *any four* of the following :— 20

(a) Give the rules of منادى with examples.

(b) Enumerate الأفعال الناقصة and state their use.

(c) Define تمييز and give examples.

(d) Give the singular or the plural, as the case may be, of—

‫ذراع ـ وتد ـ عين ـ باطن ـ سفينة ـ بحر ـ صديق ـ لسان ـ خصال ـ صورة.‬

(e) How do you form الأمر الخاص المعروف in Arabic ?

(f) Give the تعليل of يصل ـ يتَّقى ـ مقول ـ جاز ـ قل.

6. Correct :—

‫يا ابو زيد ـ ضرب زيدا ـ الشمس طلع ـ عندى ثلاثة رجلا ـ‬

‫البد ليمين‬

7. Translate into Arabic *any ten* of the following :—   25

(a) Children, you should obey your parents.

(b) Who they were, whence they came, where they were going, we could not discover.

(c) A man who rises early is healthier than one who sleeps late.

(d) Come again to morrow : I have something to tell you.

(e) I do not know when the school reopens.

(f) They study day and night.

(g) The boys found an empty bird's nest in the wood.

(h) I do not know where I can find him.

(i) Do quickly what you have to do.

(j) You must call again next week.

(k) You have done your best : no one can do more.

(l) The tail of this horse is long and its mane is short.

(m) England expects every man to do his duty.

(n) These pens are inferior to those.

(o) I have bought myself a horse and a carriage.

PERSIAN.

Paper-setters— { AGA MAHOMAD KAZIM SHIRAZI.
{ MAULAVI MUHAMMAD HIDAYAT HOSSAIN.

Head Examiner,—AGA MAHOMAD KAZIM SHIRAZI.

COMPULSORY PAPER.

Examiners— { MAULAVI A. M. WAZIH.
{ ,, MAHOMED MUSA.
{ .. MAHOMED HASSAN.
{ ,, ABDUL RAHIM.
{ ,, ABDUL BARI.
{ ,, FIDA ALI KHAN.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English *either* (A) *or* (B) :—   12

A.

مردم آزاری را حکایت کنند که سنگی بر سر صالحی زد -
درویش را مجال انتقام نبود - سنگ را با خود همیداشت
تاوقتی که ملک را برآن لشکری خشم آمد - در چاه زندانش
کرد - درویش بیامد و سنگ بر سرش کوفت - گفتا تو کیستی
و این سنگ بر من چرا زدی - گفت من فلانم - و این سنگ
همان است که درآن تاریخ بر سر من زدی . گفت چندین روزگار
کجا بودی - گفت از جاهت اندیشه می کردم - اکنون که
در چاهت دیدم فرصت را غنیمت شمردم

B.

از عبد الله بن جعفر رض الله تعالی عنهما آرند روزی
عزیمت سفر کرده بود - بنخلستان قومی فرود آمد که غلامی

سياه نگاهبان آن بود ـ ديد كه سه قرص نان بجهت قوت وى
آوردند ـ سگى آنجا حاضر شد ـ آن غلام يك قرص را پيش وى
انداخت ـ بخورد ـ پس ديگرى را بينداخت آن را هم بخورد
پس ديگرى را بينداخت ان را هم بخورد ـ عبد الله رض عنه
از وى پرسيد كه هر روز قوت تو چيست ـ گفت آنچه ديدى ـ
گفت چرا بر نفس خود ايثار نكردى ـ گفت وى درين زمين
غريب است *

4　ـ **آوردند ـ كرده بود** :ـ of the following verbs صيغه State the (a)
اندا‌خت ـ **پرسيد** ـ ديدى ـ زد ـ كوفت ـ and **مى كردم**.

3　(b) What does بان mean in نگاهبان ? Give other examples of
similar nature.

3　(c) Complete the story contained in the passage B.

2　(d) Point out the subjects of آرند and نورد آمد in extract B. ?

2.　Translate *any one* of the following passages into English :—　12

(a) چـــار چيــــز آمد نشـــان ابلهـــــى،

با تو گـــويم تا بيابـــى آگهـــى

عيـــب خود را بد نه بيند در جهان

باشد اندر جستن عيـــب كسـان

تخم بغـــل اندر دل خود كاشتـــن

آنگه اميـــد سخـــارت داشتـــن

هر كه خلق از خُلق او خوشنود نيست

هيچ قدرش بر در معبـــود نيســـت

هر كه او را پيشـــه بد خوئى بود

كار او پيـــوستـــه بد روئـــى بـــود

خـــوى بد در تن بلاى جـــان بود

مردم بد خـــو نه از انسـان بود

بر ســر بالیـــن بیمـــاران گـــذر (b)

زانکه هست این سنت خیرالبشر

تا توانی تشنـــه را سیراب کـــن

در مجالس خدمت امحـــاب کن

خـــاطـــر ایتـــام را در باب نیـــز

تا ترا پیوستـــه حق دارد عـــزیـــز

چون شود گریان یتیمـــی ناگهـــان

عرش حق در جنبش آید آن زمان

چون یتیمـــی را کسی گریان کنـــد

مـــالک اندر دوزخش بریان کنـــد

آنکه خنـــداند یتیـــم خسته را

باز یابـــد جنـــت در بستـــه را

3. (a) Give the Arabic plurals of *any five* of the following :—   5

طبیب - حکیم - رعیت - دولت - نفس - صالح - مسکین - نعمت -

شخص and صاحب

(b) How do the Persians express *thee, thine, who, which, whosoever*,   6
and *whatsoever* ?

(c) What is the meaning of the *alif* in the following distich :—   2

خوشا شیراز و وضع بیمثالش   خداوندا نگهـــدار از زوالش

(d) Write imperatives of *any six* of the following infinitives :—   5

نوردیدن - دویدن - زدن - گفتن - سوختن - نگاشتن - کردن -

شقائفن and آمدن.

(e) Form words with the following suffixes and give their mean-   5
ings :— سار - زار - لاخ - مند and ستان.

(f) How are the comparative and superlative degrees of adjectives   6
formed in Persian ?

4. Rewrite after correcting errors :—   10

مردم هامی ان شهر خیلے دانا است (a)

5

.فردا بخدمت سرکار حاضر شده بودم (b)

.دو عالم برادران بشهر افت (c)

.زید و بکر گفت که هر دو رفتم (d)

.ده مردان فاضل آمد (e)

5. Translate into Persian :—   25

One night a Qazi read in a book that whoever had a small head
and a long beard is a fool. The Qazi, having a small head and a long
beard, said to himself, ' I cannot increase the size of my head, but I
will shorten my beard.'   He sought for scissors, but could not find
them. Having no other course, he took half his beard in his hand,
and carried the other half towards the lamp : when the hair took fire,
the flames reached his hand, upon which, letting go his hand, the
beard was entirely consumed.   The Qazi was overwhelmed with
shame, as it verified what was written in the book.

PERSIAN.

ADDITIONAL PAPER.

	(MAULAVI ABDUL AZIZ.
Examiners—	,, FAKHRUDDIN AHMED.
	,, A. MANNAN, M A.
	,, ABDULLA ABU SYED.
	,, HIDAYAT HOSSAIN.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English :—   10

امیر المومنین عمر رضی الله عنه در وقت خلافت خود

در مدینۀ منوره دیواری، گل میکرد یهودئ پیش وی تظلم کرد که

حاکم بصرہ بهزار درم از من متاعی خریده است و در ادای

ثمن آن تعلل میکند فرمود که کاغذ پارۀ داری گفت نی

سفالی برداشت و بر آنجا نوشت که شکایت کنندگان از تو

بی حسابند و شکر گذاران نایاب از موجبات شکایت بپرهیز یا

از مسند حکومت برخیز و در آخر نوشت که کتبه عمربن

الخطاب نه بر آن مهری زد و نه بر آن طغرائی رقم کرد اما

چندان صولت عدالت و هیبت سیاست از وی در خاطرها

نشسته بود که چون آن سفال را بحاکم بصره داد و وی سوار بود

از اسپ فرود آمد و زمین ببوسید و وجه یهودی را تمام ادا کرد

و وی سوار ایستاده بود *

2. (a) Explain the grammatical signification of *hamza* (ء) in the 4
following:—مفوء نبذة مد - یهودی پارهٔ کاغذ - طغرائی

(b) Has the ی in هیو ری.داری, and یهودی the same or differ-
ent significations ? Give reason for your answer.

(c) Give the plurals of *any five* of the following:— درم - ثمن 5
.حاکم - کاغذ - مصلحت - وجه - آخر-مدینه

3. Translate into English :— 30

A.

نادر شاه اصلی نداشت چنانکه نوشته اند پسر پوستین دوز

بود ولی آثار بزرگی از صورتش ظاهر بود در ابتدای عمر مدتی

در خدمت ملک محمود سیستانی بسر میبرد تا موقعی که

شاه طهماسپ به خراسان میرفت به اردوی شاه طهماسپ

آمد و مورد توجه سلطان گشت و لقب طهماسپ قلیخان

یافت شاه طهماسپ بتسخیر خراسان او را مامور نمود که

آخرالامر آن مملکت را فتح کرد *

B.

حسن و حسین دو برادر بودند پدر شان در باغ بهر کدام یک

درخت میب سپرد و گفت شما تربیت کنید - حسن هرروز

درخت خود را آبیاری میکرد و حسین بخیالش که درخت

خود بخود میوه میدهد ابدا بفکر درخت خود نبود ـ روزی پدر

بتماشای باغ رفت ـ حسن رفته و چند دانه سیب از درخت

خود چیده پیش پدر آورد و گذاشت پدر سر و صورتش را بوسه

داد و آفرین گفت ـ حسین این را دیده برخاست و رفت که

او هم از درخت خود سیب بیارد و لطف پدر بیند رفت و دید

درختش خشک شده برگ هم ندارد مأیوس و نا امید

برگشت و سر خجالت بزیر افگند *

4. (a) Write out with examples the various ways in which posses-   3
sion is expressed in Persian.

     (b) Give the meanings and the 2nd person imperatives of *any*   6
six of the following infinitives :—

کاستن ـ رستن ـ درودن ـ بریدن ـ وزیدن ـ کوفتن ـ فریفتن ـ

غلطیدن ـ هشتن *

5. Give the meanings and explain the formation of *any six* of the   12
following :—

تأویل شرعی هر آئینه ـ مستجاب الدعوات ـ روی درهم

کشید ـ پیکار جستن کلوخ انداز ـ ناخوش آواز ـ شهریار ـ بازرگانان ـ

بعون الله تعالی *

6. Translate into Persian :—   25

Tell me why you have come so late. He is a wicked boy, he always
absents himself from his school. The rain has stopped, let us go for
a walk. Yesterday I saw him walking in the street, therefore he
can't be sick. Please give me a loan of rupees twelve, I will return
it to you after sixteen days. I reached Calcutta before daybreak,
and saw a large number of men bathing in the Ganges. He is very
ill and cannot sit up. Let him lie down.

FRENCH.

Examiners and { REV. FATHER E. FRANCOTTE, S.J.
Paper-setters— { T. S. STERLING, ESQ., M.A.

COMPULSORY PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English *four* of the following passages :—　　24

(*a*) Lorsqu'il prononçait les mots de vengeance et de meurtre, miss Lydia le regardait attentivement, mais sans découvrir sur ses traits la moindre trace d'émotion. Comme elle avait décidé qu'il avait la force d'âme nécessaire pour se rendre impénétrable à tous les yeux, les siens exceptés, bien entendu, elle continua de croire fermement que les mânes du colonel della Rebbia n'attendraient pas longtemps la satisfaction qu'elles réclamaient.

(*b*) Soit que l'arrivée de sa sœur eût rappelé à Orso avec plus de force le souvenir du toit paternel, soit qu'il souffrît un peu devant ses amis civilisés du costume et des manières sauvages de Colomba, il annonça dès le lendemain le projet de quitter Ajaccio et de retourner à Pietranera. Mais cependant il fit promettre au colonel de venir prendre un gîte dans son humble manoir, lorsqu'il se rendrait à Bastia, et en revanche il s'engagea à lui faire tirer daims, faisans, sangliers et le reste.

(*c*) Tout d'un coup on entendit le galop d'un cheval.
'Ah ! cette fois, c'est mon frère', dit Colomba en se levant.
Mais à la vue de Chilina montée à califourchon sur le cheval d'Orso:
'Mon frère est mort!' s'écria-t-elle d'une voix déchirante.
Le colonel laissa tomber son verre, miss Nevil poussa un cri, tous coururent à la porte de la maison.

(*d*) Retirez-vous, seigneur, et fuyez un courroux
Que ma persévérance allume contre vous.
Néron est irrité. Je me suis échappé
Tandis qu'à l'arrêter sa mère est occupée.
Adieu; réservez-vous, sans blesser mon amour,
Au plaisir de me voir justifier un jour.
Votre image sans cesse est présente à mon âme,
Rien ne l'en peut bannir.

(*e*) Mais, Narcisse, dis-moi, que veux-tu que je fasse ?
Je n'ai que trop de pente à punir son audace ;
Et, si je m'en croyais, ce triomphe indiscret
Serait bientôt suivi d'un éternel regret.
Mais de tout l'univers quel sera le langage ?
Sur les pas des tyrans veux-tu que je m'engage,
Et que Rome, effaçant tant de titres d'honneur,
Me laisse pour tous noms celui d'empoisonneur ?

(*f*) J'ai mes raisons, Narcisse ; et tu peux concevoir
Que je lui vendrai cher le plaisir de la voir.
Cependant vante-lui ton heureux stratagème :
Dis-lui qu'en sa faveur on me trompe moi-même,
Qu'il la voit sans mon ordre. On ouvre ; la voici.
Va retrouver ton maître, et l'amener ici.

2. Translate into English *three* of the following, adding notes on   12
points of grammar:—

   (*a*) Excité d'un désir.

   (*b*) Que tardez-vous, seigneur, à la répudier ?

   (*c*) J'ai vu sur ma ruine élever l'injustice.

   (*d*) Il se mordit les lèvres.

   (*e*) Mais trouvez-vous que ce soit bien héroïque ?

   (*f*) Qu'est-ce qu'elle me veut ?

<p align="center">*Either,*</p>

3. Give briefly in your own words the story of *Colomba*.   14

<p align="center">*Or,*</p>

Write short sketches of *two* of the following characters: *Burrhus,
Junie, Albine, Narcisse.*

4. Translate into English *six* of the following :—   24

   (*a*) Je me fais un devoir de ne jamais manquer de parole, surtout
à mes amis.

   (*b*) Vous pouvez être persuadée que je suis prêt à faire tout ce qui
dépendra de moi pour vous obliger

   (*c*) Si j'avais su que vous veniez, j'aurais fait préparer quelque
chose de plus.

   (*d*) Il n'est point de pays comme celui ci pour trouver toute l'année
une belle verdure.

   (*e*) Je crois que nous ferons bien de retourner à la maison : nous
attendons de la compagnie pour le thé, et nous arriverons peut-être un
peu tard.

   (*f*) Ce qui m'enchante surtout dans ces jardins, c'est l'heureux
mélange des effets de l'art et de la simplicité de la nature

   (*g*) J'espère que vous viendrez au premier jour me donner l'occa-
sion de prendre ma revanche.

   (*h*) Ce sera avec le plus grand plaisir, mais à la condition que vous
ne ferez pas plus de cérémonies avec moi que je n'en ai fait avec vous.

5. Translate into French *eight* of the following sentences:—   26

   (*a*) My heart overflows with joy.

   (*b*) All my wishes are gratified.

   (*c*) I took a liking to him the first time I saw him.

   (*d*) Such a friend is a treasure.

   (*e*) Is there any news to-day ?

   (*f*) I have spent a very pleasant day.

   (*g*) It is a quarter to twelve.

   (*h*) He got up at four o'clock in the morning.

   (*i*) I am very hungry.

   (*j*) My sleep was much disturbed.

FRENCH.

ADDITIONAL PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate *two* of the following passages :—

    (*a*)   *Junie.*

    Ah ! Seigneur ! *Vous* parlez contre votre pensée,
    Vous-même, vous m'avez avoué mille fois
    Que Rome le louait d'une commune voix ;
    Toujours à sa vertu vous rendiez *quelque* hommage.
    Sans doute la douleur vous dicte ce langage.

    (*b*)   *Britannicus.*

    Pour moi, quelque péril *qu'*me puisse accabler,
    La seule inimitié peut me faire trembler.

                Néron.

    Souhaitez-la ; c'est tout ce *que* je vous puis dire.

              Britannicus.

    Le bonheur de lui plaire est le seul où j'aspire.

              Néron.

    Elle vous l'a promis, vous lui plairez toujours.

    (*c*)   *Agrippine.*

    Le voici.   *Vous verrez* si c'est moi qui l'inspire.

       Néron, voyant Agrippine.
    Dieu !

         Agrippine.

        Arrêtez, Néron : j'ai deux mots à vous dire :
    Britannicus est mort : je reconnais les coups :
    Je connais l'assassin.

              Néron.

          Et qui, madame ?

         Agrippine.
                     Vous.

2. Translate *three* of the following passages :—

    (*a*) C'est une phrase du marquis de Mascarille, monsieur della
Rebbia, je crois, mais . . . voulez-*vous* que je *vous* donne une preuve
de ma pénétration ? Je suis un peu sorcière, et je sais ce que pensent
les gens que j'ai vus deux fois.—Mon Dieu ! vous m'effrayez !

(b) ' Lieutenant della Rebbia, vous n'êtes pas à votre place de bataille, trois jours d'arrêts—Vos tirailleurs sont a cinq mètres *trop* loin de la réserve, cinq jours d'arrêts—Vous êtes en bonnet de police à midi cinq minutes, huit jours d'arrêts.' Une seule fois, aux Quatre-Bras, il lui avait dit : 'Très-bien, Orso ; mais de la *prudence*.'

(c) De la part d'un misérable comme paraît être *ce* Bianchi, tout s'explique, dit Orso, trompé par l'air de modération de *sa* sœur.—La lettre contrefaite, continua Columba, dont les yeux commençaient à briller d'un éclat plus vif, est datée du 11 juillet. Tomaso était alors chez son frère, au moulin.

(d) Dans un moment *pressant*, dit Orso, quelques pièces d'or font grand bien. Maintenant *que* nous sommes de vieilles connaissances, vous ne me refuserez pas cette petite cartouche qui peut vous servir à vous en procurer d'autres.—Pas d'argent entre nous, lieutenant, dit Brandolaccio d'un ton résolu.

3. (a) Parse fully *six* of the words in italics (Questions 1 and 2). **3**

(b) In 1 (b) give another turn to the second line, so as to make **1** the meaning clearer.

(c) In what part of Extract 1 (a) does Junie soften the reproof **1** she makes use of in the first line ?

(d) Give the principal parts (*temps primitifs*) of—*pouvoir, faire,* **4,** *voir, dire.*

(e) Translate:—*en somme, explique qui pourra, au grand soleil,* **5,** *se faire une mauvaise affaire, petit-cousin,' avoir une bonne tournure, éclater de rire, par un clair de lune, dormir sur les deux oreilles, à l'anglaise.*

(f) What do you know about—*Les Cent-Jours, Quatre-Bras,* **3** *Dante* ?

4. (a) Write the plural form of the following :—*souvenir, lis, jeu,* **3** *hôpital, chacal, émail.*

(b) What do you know about the formation of the feminine of **2** substantives ? Give the feminine of—*marquis abbé, dieu, accusateur, veuf, sot, bigot, chartreux.*

(c) Write the masculine of the following adjectives :—*active,* **2** *jalouse, douce, rousse, vieille dernière, menteuse, meilleure.*

(d) Give the comparative and superlative of—*bon, mauvais, petit,* **3** *bien, mal, peu.*

(e) What tenses are called *temps primitifs* in French ? Illustrate **4** the derivation of other tenses from *any one* of them.

(f) What do you know about the agreement of the past participle **4** connected with the auxiliaries *avoir* and *être* ?

5. Translate into idiomatic English :— **30**
Un paysan, nommé Thomas, avait affaire en ville. Il persuada à son ami Lubin de venir avec lui. En chemin, Thomas trouva une bourse remplie de pièces d'or.—'Quelle bonne aubaine pour nous !' s'écria Lubin.—'Pour nous ? reprit Thomas, tu te trompes ; ce n'est pas pour nous, c'est pour toi que tu dois dire. Chacun pour soi, Dieu pour tous !' En prononçant ces mots, il empocha la bourse. Lubin continua son chemin dans le plus profond silence. Au bout d'un quart d'heure, les deux amis entrèrent dans une épaisse forêt qu'ils devaient traverser pour arriver à la ville. A peine y eurent-ils fait cent pas, que deux voleurs, cachés derrière un grand arbre, se jetèrent sur eux en criant : 'La bourse ou la vie !' Thomas s'écria : 'Mon Dieu, c'en est fait de nous !'—' Nous ? reprit Lubin, tu te trompes : nous, n'est pas le mot ; toi, c'est autre chose !'

6. Translate into idiomatic French :—

25

Six o'clock had just struck when I returned.—What are we going to do ?—I am going to take a walk. --I ought to have gone to London to-day, but I am not very well.—I have had to buy these books which I do not want.—I have just arrived.—My brother has just finished his lessons ; wait for him.—I ought to write some letters.—I did not find him ; he had just gone out.—My sisters are to go to the concert, and I am to accompany them.—Our friends have been obliged to sell their garden.—I should like to have seen him.

GREEK.

Examiners and   (Dr. H. Stephen, M.A., D.D.
Paper-setters—   (Rev. Dr. G. Howells, M.A., Ph.D.

Compulsory Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate the following passages :—

25

(a) Πορευόμενοι δὲ ἀφίκοντο εἰς κώμας ὅθεν ἀπέδειξαν οἱ ἡγεμόνες λαμβάνειν τὰ ἐπιτήδεια· ἐνῆν δὲ σῖτος πολὺς καὶ οἶνος φοινίκων καὶ ὄξος ἑψητὸν ἀπὸ τῶν αὐτῶν· αὐταὶ δὲ αἱ βάλανοι τῶν φοινίκων οἵας μὲν ἐν τοῖς Ἕλλησιν ἔστιν ἰδεῖν τοῖς οἰκέταις ἀπέκειντο, αἱ δὲ τοῖς δεσπόταις ἀποκείμεναι ἦσαν ἀπόλεκτοι, θαυμάσιαι τοῦ κάλλους καὶ μεγέθους, ἡ δὲ ὄψις ἠλέκτρου οὐδὲν διέφερε. τὰς δέ τινας ξηραίνοντες τραγήματα ἀπετίθεσαν. καὶ ἦν καὶ παρὰ πότον ἡδὺ μέν, κεφαλαλγὲς δέ. ἐνταῦθα καὶ τὸν ἐγκέφαλον τοῦ φοίνικος πρῶτον ἔφαγον οἱ στρατιῶται, καὶ οἱ πολλοὶ ἐθαύμασαν τό τε εἶδος καὶ τὴν ἰδιότητα τῆς ἡδονῆς. ἦν δὲ σφόδρα καὶ τοῦτο κεφαλαλλές. ὁ δὲ φοῖνιξ ὅθεν ἐξαιρεθείη ὁ ἐγκέφαλος ὅλος αὐαίνετο.

(b) Οὐκ ἔστι θνητῶν ὅστις ἔστ' ἐλεύθερος·
ἢ χρημάτων γὰρ δοῦλός ἐστιν ἢ τύχης,
ἢ πλῆθος αὐτὸν πόλεος ἢ νόμων γραφαὶ
εἴργουσι χρῆσθαι μὴ κατὰ γνώμην τρόποις.
ἐπεὶ δὲ ταρβεῖς τῷ τ' ὄχλῳ πλέον νέμεις,
ἐγώ σε θήσω τοῦδ' ἐλεύθερον φόβου.
ξύνισθι μὲν γάρ, ἤν τι βουλεύσω κακὸν
τῷ τόνδ' ἀποκτείναντι, συνδράσῃς δὲ μή.
ἢν δ' ἐξ Ἀχαιῶν θόρυβος ἢ 'πικουρία
πάσχοντος ἀνδρὸς Θρῃκὸς οἷα πείσεται
φανῇ τις, εἶργε μὴ δοκῶν ἐμὴν χάριν.
τὰ δ' ἄλλα θάρσει· πάντ' ἐγὼ θήσω καλῶς.

(c) *KAI* ἐγένετο παραπορεύεσθαι αὐτὸν ἐν τοῖς σάββασι διὰ τῶν σπορίμων· καὶ ἤρξαντο οἱ μαθηταὶ αὐτοῦ ὁδὸν ποιεῖν τίλλοντες τοὺς στάχυας. Καὶ οἱ Φαρισαῖοι ἔλεγον αὐτῷ· Ἴδε, τί ποιοῦσιν ἐν τοῖς σάββασιν ὃ οὐκ ἔξεστι; Καὶ αὐτὸς ἔλεγεν αὐτοῖς· Οὐδέποτε ἀνέγνωτε, τί ἐποίησε Δαβίδ, ὅτε χρείαν ἔσχε, καὶ ἐπείνασεν αὐτὸς καὶ οἱ μετ' αὐτοῦ; Πῶς εἰσῆλθεν εἰς τὸν οἶκον τοῦ Θεοῦ ἐπὶ Ἀβιάθαρ τοῦ ἀρχιερέως, καὶ τοὺς ἄρτους τῆς προθέσεως ἔφαγεν—οὓς οὐκ ἔξεστι φαγεῖν εἰ μὴ τοῖς ἱερεῦσι—καὶ ἔδωκε καὶ τοῖς σὺν αὐτῷ οὖσι; Καὶ ἔλεγεν αὐτοῖς· Τὸ σάββατον διὰ τὸν ἄνθρωπον ἐγένετο, οὐχ ὁ ἄνθρωπος διὰ τὸ σάββατον. Ὥστε κύριός ἐστιν ὁ υἱὸς τοῦ ἀνθρώπου καὶ τοῦ σαββάτου.

2. Parse and give the principal parts of the verbs contained in the first passage.　　11

3. Give the context of and write brief annotations on the second passage.　　7

4. *Either,* Describe briefly the plot of *Hecuba.*　　7

Or, Indicate the more important characteristics of the Gospel of St. Mark.

5. Translate the following passages into English:—　　35,

(a) Ἐπεὶ ἔδοξεν ἐπὶ Πέρσας στρατεύειν, οἱ Ἕλληνες ἐς τὸν Ἰσθμὸν συλλεγέντες Ἀλέξανδρον ἡγεμόνα ἀνηγόρευσαν· καὶ πολλοὶ μὲν ἄνδρες πολιτικοὶ καὶ φιλόσοφοι ἦλθον ἐκεῖσε ἀσπασόμενοι αὐτόν. Διογένης δὲ ὁ Σινωπεύς, καίπερ ἐν Κορίνθῳ ἐν τῷ τότε διατρίβων, οὐκ ἦλθεν· ἀκούσαντι δὲ τοῦτο τῷ Ἀλεξάνδρῳ ἔδοξεν αὐτῷ πορεύεσθαι ὡς ἐκεῖνον. ἐλθὼν δὲ μετὰ τῶν ἑταίρων κατέλαβε τὸν Διογένην ἐν τῷ ἡλίῳ κατακείμενον. θαυμάσας οὖν τοσοῦτον τις ἄνδρας, ἀνεκάθισε, καὶ εἰς τὸν Ἀλέξανδρον διέβλεψε· καὶ ὁ μὲν βασιλεὺς ἠσπάσατο αὐτὸν καὶ ἠρώτησεν, εἴ του τυγχάνει δεόμενος. ὁ δέ "μικρόν," ἔφη, "ἀπὸ τοῦ ἡλίου μετάστηθι." ταῦτα δὴ ἀκούσας ὁ Ἀλέξανδρος οὕτως ἐθαύμασε τὴν μεγαλοψυχίαν τοῦ ἀνδρός, ὥστε, τῶν περὶ αὐτὸν γελώντων καὶ σκωπτόντων, "ἔγωγε," εἶπεν, "εἰ μὴ Ἀλέξανδρος ἦν, Διογένης ἂν ἦν."

(b) Καὶ ἔρχονται εἰς Ἱεριχώ· καὶ ἐκπορευομένου αὐτοῦ ἀπὸ Ἱεριχώ, καὶ τῶν μαθητῶν αὐτοῦ, καὶ ὄχλου ἱκανοῦ, υἱὸς Τιμαίου, Βαρτίμαιος ὁ τυφλός, ἐκάθητο παρὰ τὴν ὁδὸν προσαιτῶν. Καὶ ἀκούσας ὅτι Ἰησοῦς ὁ Ναζωραῖός ἐστιν, ἤρξατο κράζειν καὶ λέγειν· Ὁ υἱὸς Δαβίδ, Ἰησοῦ, ἐλέησόν με. Καὶ ἐπετίμων αὐτῷ πολλοί, ἵνα σιωπήσῃ· ὁ δὲ πολλῷ μᾶλλον ἔκραξεν· Υἱὲ Δαβίδ, ἐλέησόν με. Καὶ στὰς ὁ Ἰησοῦς εἶπεν αὐτὸν φωνηθῆναι· καὶ φωνοῦσι τὸν τυφλόν, λέγοντες αὐτῷ· Θάρσει, ἔγειραι· φωνεῖ σε. Ὁ δὲ ἀποβαλὼν τὸ ἱμάτιον αὐτοῦ, ἀναστὰς ἦλθε πρὸς τὸν Ἰησοῦν. Καὶ ἀποκριθεὶς λέγει αὐτῷ ὁ Ἰησοῦς· Τί θέλεις ποιήσω σοι; Ὁ δὲ τυφλὸς εἶπεν αὐτῷ· Ῥαββουνί, ἵνα ἀναβλέψω. Ὁ δὲ Ἰησοῦς εἶπεν αὐτῷ· Ὕπαγε, ἡ πίστις σου σέσωκέ σε. Καὶ εὐθέως ἀνέβλεψε, καὶ ἠκολούθει αὐτῷ ἐν τῇ ὁδῷ.

6　Translate any *three* of the following sentences into Greek:—　　25

(a) The generals ordered us not to enter this city.

(b) If you do this, you will be thought to be an enemy of your country.

(c) After this will they not be allowed to take whatever seems good to them ?

(d) Because of this they say they do not know why we have come ·

˙ GREEK.

ADDITIONAL PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate :—   20

(a) Aγ.   Οὐχ ὅσον τάχος
νήσων ἐρήμων αὐτὸν ἐκβαλεῖτέ που,
ἐπείπερ οὕτω καὶ λίαν θρασυστομεῖ;
Ἑκάβη, σὺ δ', ὦ°τάλαινα, διπτύχους νεκρούς
στείχουσα θάπτε· δεσποτῶν δ' ὑμᾶς χρεὼν
σκηναῖς πελάζειν, Τρῳάδες· καὶ γὰρ πνοὰς
πρὸς οἶκον ἤδη τάσδε πομπίμους ὁρῶ.
εὖ δ' ἐς πάτραν πλεύσαιμεν, εὖ ‹ὲ τὰν δόμοις
ἔχοντ' ἴδοιμεν τῶνδ' ἀφειμένοι πόνων.
Χορ. Ἴτε πρὸς λιμένας σκηνάς τε, φίλαι,
τῶν δεσποσύνων πειρασόμεναι
μόχθων· στερρὰ γὰρ ἀνάγκη.

Parse ἀφειμένοι and give its principal parts. Derive the compound words. Account for the optatives.

(b) Οὐχ ἥδ' ἄνασσα τῶν πολυχρύσων Φρυγῶν ;
καὶ νῦν πόλις μὲν πᾶσ' ἀνέστηκεν δορί·
αὕτη δὲ δούλη, γραῦς, ἄπαις ἐπὶ χθονὶ
κεῖται, κόνει φύρουσα δύστηνον κάρα.
φεῦ, φεῦ· γέρων μέν εἰμ', ὅμως δέ μοι θανεῖν
εἴη πρὶν αἰσχρᾷ περιπεσεῖν τύχῃ τινί.

Parse and give the parts of θανεῖν. Scan the last two lines.

(c)   Ἡ Παλλάδος ἐν πόλει
τᾶς καλλιδίφρου τ' Ἀθα-
ναίας ἐν κροκέῳ πέπλῳ
ζεύξομαι ἄρματα πώλους,
ἐν δαιδαλέαισι ποικίλλουσ'
ἀνθοκρόκοισι πήναις
ἢ Τιτάνων γενεὰν
τὰν Ζεὺς ἀμφιπύρῳ
κοιμίζει φλογμῷ Κρονίδας.

In which of the Greek dialects is this written ? Explain the structure of a choral ode and the function of the chorus. Mention any English poem in which the same structure is observed.

(*d*) Καὶ τοῖς μὲν τῶν πολεμίων κτήμασιν οὐκ ἐπεβούλευε· χαλεπὸν γὰρ ῷετο εἶναι τὰ τῶν φυλαττομένων λαμβάνειν. τὰ δὲ τῶν φίλων μόνος ῷετο εἰδέναι ῥᾷστον ὃν ἀφύλακτα λαμβάνειν. καὶ ὅσους μὲν αἰσθάνοιτο ἐπιόρκους καὶ ἀδίκους, ὡς εὖ ὡπλισμένους ἐφοβεῖτο, τοῖς δ' ὁσίοις καὶ ἀλήθειαν ἀσκοῦσιν ὡς ἀνάνδροις ἐπειρᾶτο χρῆσθαι.

Parse ῷετο, ῥᾷστον and εἰδέναι. Give some account of the person here referred to.

2. Turn into Greek :—   **30**

In the first book of the Anabasis Xenophon tells how a Greek force was gathered together round Cyrus the younger, when he was going to make war against his brother the king ; and what things happened in the upward march ; and how the battle took place ; and how Cyrus died ; and how the Greeks, returning to their camp, went to rest thinking that they had won the battle, and that Cyrus was still alive. But next day, the generals, coming together, wondered that Cyrus neither appeared himself, nor sent anyone else to tell them what to do. And as the sun was rising certain officers came and told them that Cyrus was dead.

3. Translate (without preparation) :—   **30**

Either, (*a*) *The self-sacrifice of Alcestis.*

Ἀπόλλων Ἀδμήτῳ, τῷ βασιλεῖ τῶν Φερῶν. ἐθήτευσε καὶ ἠτήσατο παρὰ Μοιρῶν, ἵν., ὅταν Ἄδμητος μέλλῃ τελευτᾶν, ἀπολυθῇ τοῦ θανάτου, ἂν ἑκουσίως τις ὑπὲρ αὐτοῦ θνήσκειν ἕληται. ὡς δὲ ἦλθεν ἡ τοῦ θνήσκειν ἡμέρα, μήτε τοῦ πατρός μήτε τῆς μητρὸς ὑπὲρ αὐτοῦ θνήσκειν θελόντων, Ἄλκηστις ἡ αὐτοῦ ἄλοχος ὑπεραπέθανε. καὶ αὐτὴν πάλιν ἀνέπεμψεν ἡ Κόρη· ὡς δὲ ἔνιοι λέγουσιν, Ἡρακλῆς μαχεσάμενος τῷ Θανάτῳ.

Or, (*b*) *Poseidon mourns for Hecuba.*

> Τὴν δ' ἀθλίαν τήνδ' εἴ τις εἰσορᾶν' θέλει,
> πάρεστιν Ἑκάβη κειμένη πυλῶν πάρος
> δάκρυα χέουσα πολλὰ καὶ πολλῶν ὕπερ.
> ᾗ παῖς μὲν ἀμφὶ μνῆμ' Ἀχιλλείου τάφου
> λάθρα τέθνηκε τλημόνως Πολυξένη·
> φροῦδος δὲ Πρίαμος καὶ τέκν'· ἣν δὲ παρθένον
> μεθῆκ' Ἀπόλλων δρομάδα Κασάνδραν ἄναξ,
> τὸ τοῦ θεοῦ τε παραλιπὼν τό τ' εὐσεβὲς
> γαμεῖ βιαίως σκότιον Ἀγαμέμνων λέχος.
> ἀλλ', ὦ ποτ' εὐτυχοῦσα, χαῖρέ μοι, πόλις
> ξεστόν τε πύργωμ'· εἴ σε μὴ διώλεσε
> Παλλὰς Διὸς παῖς, ἦσθ' ἂν ἐν βάθροις ἔτι.

4. (*a*) Decline in the singular—τάχος, δορί κάρα, and γραῦς.   **20**
  (*b*) Conjugate the future indicative active of βάλλω, and the present and imperfect active and middle of ἵημι.
  (*c*) Give short sentences in Greek to show how ' place where,' ' place whence,' and ' place whither ' are expressed in Greek.

LATIN.

Paper-setters— ⎰ Rev. A. B. Johnston, M.A.
⎱ W. C. Wordsworth, Esq., M.A.

Compulsory.

*Examiner—*Rev. A. B. Johnston, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks

1. Translate into English :—

(*a*) Hoc facto proelio, Caesar neque iam sibi legatos audiendos   5
neque condiciones accipiendas arbitrabatur ab eis qui per dolum atque
insidias petita pace ultro bellum intulissent: exspectare vero, dum
hostium copiae augerentur equitatusque reverteretur, summae dem-
entiae esse iudicabat, et, cognita Gallorum infirmitate, quantum iam
apud eos hostes uno proelio auctoritatis essent consecuti sentiebat ;
quibus ad consilia capienda nihil spatii dandum existimabat.

Write grammatical notes on—*exspectare, dum . . . augerentur, auc-   3
toritatis.*

Was Caesar's action justified ?   2

(*b*) Genus hoc est ex essedis pugnae. Primo per omnes partes   5
perequitant et tela coniciunt atque ipso terrore equorum et strepitu
rotarum ordines plerumque perturbant, et cum se inter equitum turmas
insinuaverunt, ex essedis desiliunt et pedibus proeliantur. Aurigae
interim paulatim ex proelio excedunt atque ita currus collocant, ut
si illi a multitudine hostium premantur, expeditum ad suos receptum
habeant. Ita mobilitatem equitum, stabilitatem peditum in proeliis
praestant, ac tantum usu cotidiano et exercitatione efficiunt, uti in
declivi ac praecipiti loco incitatos equos sustinere et brevi moderari
ac flectere et per temonem percurrere et in iugo insistere et se inde in
currus citissime recipere consuerint.

Give a brief account of Caesar's first expedition to Britain.   2

Write notes on—*si . . . premantur; consuerint.*   2

(*c*) Translate and write notes on :—   6

(i) Erat in Carnutibus summo loco natus Tasgetius.

(ii) Id tulit factum graviter Indutiomarus, suam gratiam inter
suos minui, et qui iam ante inimico in nos animo fuisset, multo gra-
vius hoc dolore exarsit.

(iii) Caesar cognito consilio eorum ad flumen Tamesim in fines
Cassivellauni exercitum duxit.

2. Translate into English :—

(*a*) Aeneas maesto defixus lumina voltu   4
ingreditur, linquens antrum, caecosque volutat
eventus animo secum : cui fidus Achates
it comes et paribus curis vestigia figit.

Write a grammatical note on *lumina*.   1

Explain briefly the circumstances to which these lines refer.   2

(b) Centauri in foribus stabulant, Scyllaeque biformes,   3
   et centumgeminus Briareus, ac belua Lernae
   horrendum stridens, flammisque armata Chimaera,
   Gorgones, Harpyiaeque, et forma tricorporis umbrae.

Explain shortly the mythological allusions here.   4

(c) Excudent alii spirantia mollius aera,   5
   credo equidem, vivos ducent de marmore voltus,
   orabunt causas melius, caelique meatus   '7
   describent radio, et surgentia sidera dicent :
   tu regere imperio populos, Romane, memento—
   hae tibi erunt artes—pacisque imponere morem,
   parcere subiectis, et debellare superbos.

Mention three great Roman heroes whom Vergil eulogizes, and   3
briefly explain their greatness.

Explain shortly the Vergilian idea of death and what comes after   3
death.

3. Translate into English :—   25

   Ecce, velut torrens, undis pluvialibus auctus
      aut nive. quae Zephyro victa repente fluit,
   per sata perque vias fertur, nec, ut ante solebat,
      riparum clausas margine finit aquas :
   sic Fabii latis vallem discursibus implent ;
      quosque vident sternunt ; nec metus alter inest.
   fraude perit virtus. in apertos undique campos
      prosiliunt hostes et latus omne tenent.
   quid faciant pauci contra tot milia fortes ?
      quidve. quod in misero tempore restet, habent?
   una dies Fabios ad bellum miserat omnes :
      ad bellum missos perdidit una dies.

4. Translate into Latin :—

   (a) It is still uncertain whether our men have won the day or   5
not ; but I am certain that they have been false neither to their allies
nor to their country.

   (b) Do not be afraid ; I shall leave you to come to Rome as often   5
as you please ; and when you come there be sure you stay in my
house if you can.

   (c) I have long been warning you whom it is your duty to guard   5
against, whom to fear.

   (d) If he were a man of more than average wisdom, yet he would   5
not be able to resist your arguments, nor to arouse the prejudices of
the people after you had spoken.

   (e) The longer the war is protracted, the more oppressive will be   5
the conditions of peace. Can you wonder then that the truest patri-
ots are the most ardent advocates of peace ?

LATIN.

ADDITIONAL PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate :— 10

    (a) Haec omnia Caesar eodem illo pertinere arbitrabatur, ut tridui mora interposita equites eorum, qui abessent, reverterentur : tamen sese non longius milibus passuum quattuor aquationis causa processurum eo die dixit

    (b) Omnia excogitantur, quare nec sine periculo maneatur et languore militum et vigiliis periculum augeatur. Prima luce sic ex castris proficiscuntur, ut quibus esset persuasum non ab hoste, sed ab homine amicissimo Ambiorige consilium datum, longissimo agmine maximisque impedimentis.

    (c) Fit gemitus. Tum membra toro defleta reponunt
    purpureasque super vestes, velamina nota,
    coniiciunt. Pars ingenti subiere feretro
    (triste ministerium) et subiectam more parentum
    aversi tenuere facem. Congesta cremantur
    turea dona, dapes, fuso crateres olivo.

    (d) Infelix Dido, verus mihi nuntius ergo
    venerat exstinctam ferroque extrema secutam ?
    Funeris heu tibi causa fui ? Per sidera iuro,
    per superos et si qua fides tellure sub ima est,
    invitus, regina, tuo de litore cessi.
    sed me iussa deum, quae nunc has ire per umbras,
    per loca senta situ cogunt noctemque profundam,
    imperiis egere suis.

2. Translate, and write grammatical notes on the words in italics :— 5

    (a) *Diebus decem*, quibus materia *coepta erat* comportari, omni opere effecto exercitus traducitur.

    (b) Cuius loci haec erat natura, atque ita montibus angustis mare continebatur, uti ex locis superioribus in litus telum adigi *posset*.

    (c) *Tertium iam hunc annum* regnantem inimici multis palam ex civitate *auctoribus* interfecerunt.

    (d) Praeterea accidit, *quod* fieri necesse erat, ut *volgo* milites ab signis *discederent*.

3. Explain the allusions in :— 5

    (a) Et tandem Euboicis Cumarum allabitur oris.
    (b)   Via prima salutis,
        quod minime reris, Graia pandetur ab urbe.
    (c)   Neque te Phoebi cortina fefellit,
        dux Anchisiade, nec me deus aequore mersit.
    (d) Gnosius haec Rhadamanthus habet durissima regna.
    (e) Quin et avo comitem sese Mavortius addet
        Romulus, Assaraci quem sanguinis Ilia mater
        educet.

Explain the use of *ab* in (b).

4. Translate:—   30

Caesar, cum suam lenitatem cognitam omnibus sciret neque vere-
retur, ne quid crudelitate naturae videretur asperius fecisse, neque
exitum consiliorum suorum animadverteret, si tali ratione diversis in
locis plures consilia inissent, exemplo supplicii deterrendos reliquos
existimavit. Itaque omnibus, qui arma tulerant, manus praecidit-
vitamque concessit, quo testatior esset poena improborum. Drappes,
quem captum esse a Caninio docui, sive indignitate et dolore vincul-
orum sive timore gravioris supplicii paucis diebus cibo se abstinuit
atque ita interiit. Eodem tempore Lucterius, quem profugisse ex
proelio scripsi, cum in potestatem venisset Epasnacti Arverni (crebro
enim mutandis locis multorum fidei se committebat, quod nusquam
diutius sine periculo commoraturus videbatur, cum sibi conscius
esset, quam inimicum deberet Caesarem habere), hunc Epasnactus
Arvernus, amicissimus populo Romano, sine dubitatione ulla vinctum
ad Caesarem deduxit.

5. (◡) Parse :—*defuncte, desine, fac, inultus, redactas, urgeri, cohor-*   10
tandi, fixum, antiquitus.   *Either,*

(b) Construct sentences illustrating the use of each of the follow-
ing words :—*clam, quin, quominus, prae, quisque.*

Or,

Give, with examples, the chief uses of the infinitive and supines.
6. (a) Explain with examples :—gerundive attraction, partitive   10
genitive, dative of purpose.   *Either,*

(b) Give the Latin for—three years ago, because of their skill,
anxious to rule, to shout, he was informed, relying on their assistance,
a transport vessel.   *Or,*

Give the derivation of eight only of the following words :—con-
script, empire, equestrian, Mediterranean, confines, colony, rivulet,
oriental, assist, solstice, protect, temerity.

(c) What classes of verbs complete their construction with the
dative case ?

7. Translate into Latin :—   30

Then the general, perceiving a safe opportunity, led his army secret-
ly through the wood and attacked the enemy at dawn. They, taken
unawares,[1] offered a poor resistance, and were soon in flight, leaving
many dead upon the field of battle. This defeat terrified the neigh-
bouring peoples, who at once sent hostages and made submission.
This degree of success was satisfactory, as the rainy season was ap-
proaching, when further operations would have been impossible. The
general, however, threw away all his advantages: for, carelessly
marching back to the coast, he lost his way and found himself in the
midst of a marshy tract where paths were wanting and food was not
to be obtained. Here he was blockaded by the enemy who combined
again at the first hint of his difficulties: and here he had to wait, his
men dying of misery, disease. and starvation around him, until
reinforcements and supplies could reach him from the mainland.

HEBREW.

Paper-setters and { Rev. Dr. G. Howells, M.A., Ph.D.
Examiners— { A. H. Harley, Esq., M.A.

.Compulsory Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate the following passages :— **25**

(a) וַיֹּאמֶר יְהוָֹה אֶל־אַבְרָם לֶךְ־לְךָ מֵאַרְצְךָ וּמִמּוֹלַדְתְּךָ
וּמִבֵּית אָבִיךָ אֶל־הָאָרֶץ אֲשֶׁר אַרְאֶךָּ: וְאֶעֶשְׂךָ לְגוֹי גָּדוֹל
וַאֲבָרֶכְךָ וַאֲגַדְּלָה שְׁמֶךָ •וֶהְיֵה בְּרָכָה: וַאֲבָרְכָה מְבָרְכֶיךָ
וּמְקַלֶּלְךָ אָאֹר וְנִבְרְכוּ בְךָ •כֹּל מִשְׁפְּחֹת הָאֲדָמָה: וַיֵּלֶךְ
אַבְרָם כַּאֲשֶׁר דִּבֶּר אֵלָיו יְהוָֹה וַיֵּלֶךְ אִתּוֹ לוֹט וְאַבְרָם בֶּן־
חָמֵשׁ שָׁנִים וְשִׁבְעִים שָׁנָה בְּצֵאתוֹ מֵחָרָן: וַיִּקַּח אַבְרָם
אֶת־שָׂרַי אִשְׁתּוֹ וְאֶת־לוֹט בֶּן־אָחִיו וְאֶת־כָּל־רְכוּשָׁם אֲשֶׁר
רָכָשׁוּ וְאֶת־הַנֶּפֶשׁ אֲשֶׁר־עָשׂוּ בְחָרָן וַיֵּצְאוּ לָלֶכֶת אַרְצָה כְּנַעַן
וַיָּבֹאוּ אַרְצָה כְּנָעַן: וַיַּעֲבֹר אַבְרָם בָּאָרֶץ עַד מְקוֹם שְׁכֶם
עַד אֵלוֹן מוֹרֶה וְהַכְּנַעֲנִי אָז בָּאָרֶץ: וַיֵּרָא יְהוָֹה אֶל־אַבְרָם
וַיֹּאמֶר לְזַרְעֲךָ אֶתֵּן אֶת־הָאָרֶץ הַזֹּאת וַיִּבֶן שָׁם מִזְבֵּחַ לַיהוָֹה
הַנִּרְאֶה אֵלָיו: וַיַּעְתֵּק מִשָּׁם הָהָרָה מִקֶּדֶם לְבֵית־אֵל וַיֵּט •
אָהֳלֹה בֵּית־אֵל מִיָּם וְהָעַי מִקֶּדֶם וַיִּבֶן־שָׁם מִזְבֵּחַ לַיהוֹה וַיִּקְרָא
בְּשֵׁם יְהוָֹה: וַיִּסַּע אַבְרָם הָלוֹךְ וְנָסוֹעַ הַנֶּגְבָּה:

(b) לְעוֹלָם יְהוָֹה דְּבָרְךָ נִצָּב בַּשָּׁמָיִם: לְדֹר וָדֹר אֱמוּנָתֶךָ
כּוֹנַנְתָּ אֶרֶץ וַתַּעֲמֹד: לְמִשְׁפָּטֶיךָ עָמְדוּ הַיּוֹם כִּי הַכֹּל עֲבָדֶיךָ:
לוּלֵי תוֹרָתְךָ שַׁעֲשֻׁעָי אָז אָבַדְתִּי בְעָנְיִי: לְעוֹלָם לֹא־אֶשְׁכַּח

פִּקֻּדֶיךָ כִּי־בָם חִיִּיתָנִי : לְךָ־אֲנִי הוֹשִׁיעֵנִי כִּי פִקּוּדֶיךָ דָרָשְׁתִּי :
לִי קִוּוּ רְשָׁעִים לְאַבְּדֵנִי עֵדֹתֶיךָ אֶתְבּוֹנָן : לְכָל־תִּכְלָה רָאִיתִי
קֵץ רְחָבָה מִצְוָתְךָ מְאֹר :

(c) וְהֶחֱזִיקוּ שֶׁבַע נָשִׁים בְּאִישׁ אֶחָד בַּיּוֹם הַהוּא לֵאמֹר
לַחְמֵנוּ נֹאכֵל וְשִׂמְלָתֵנוּ נִלְבָּשׁ רַק יִקָּרֵא שִׁמְךָ עָלֵינוּ אֱסֹף
חֶרְפָּתֵנוּ : בַּיּוֹם הַהוּא יִהְיֶה צֶמַח יְהוָה לִצְבִי וּלְכָבוֹד וּפְרִי
הָאָרֶץ לְגָאוֹן וּלְתִפְאֶרֶת לִפְלֵיטַת יִשְׂרָאֵל : וְהָיָה | הַנִּשְׁאָר
בְּצִיּוֹן וְהַנּוֹתָר בִּירוּשָׁלַם קָדוֹשׁ יֵאָמֶר לוֹ כָּל־הַכָּתוּב לַחַיִּים
בִּירוּשָׁלָם : אִם | רָחַץ אֲדֹנָי אֵת צֹאַת בְּנוֹת־צִיּוֹן וְאֶת־דְּמֵי
יְרוּשָׁלַם יָדִיחַ מִקִּרְבָּהּ בְּרוּחַ מִשְׁפָּט וּבְרוּחַ בָּעֵר : וּבָרָא
יְהוָה עַל כָּל־מְכוֹן הַר־צִיּוֹן וְעַל־מִקְרָאֶהָ עָנָן | יוֹמָם וְעָשָׁן
וְנֹגַהּ אֵשׁ לֶהָבָה לָיְלָה כִּי עַל־כָּל־כָּבוֹד חֻפָּה : וְסֻכָּה תִּהְיֶה
לְצֵל־יוֹמָם מֵחֹרֶב וּלְמַחְסֶה וּלְמִסְתּוֹר מִזֶּרֶם וּמִמָּטָר :

2. Parse all the verbs in the first passage given above. 12
3. Give the rules, with examples, for (a) the pointing of the 12
article; (b) the use of the construct state; (c) the use of the Waw
consecutive.
4. 'Our Pentateuch is a catena of materials from sources of vari- 13
ous dates, and by various authors, arranged according to the persons
and events dealt with.' Discuss this statement.
5. (a) Decline in the singular and plural with inflexional additions, 13
either מֶלֶךְ *or* סֵפֶר. (b) Give the Piel (Perfect and Imperfect) of
בָּרַךְ.

6. Translate into pointed Hebrew the following:— 25
(a) The people did not drink from the waters of the river, for
they were blood.
(b) We have not kept the covenant of our God with all our heart.
(c) Trust in Jahweh, the God of Israel, and lean not unto thine
own understanding.
(d) Bury me not in Egypt, but I will lie with my fathers and
thou shalt bury me in their burying-place.
(e) And they forgot Jahweh, and he sold them into the hand of
their enemies and they fought against him.

HEBREW.

ADDITIONAL PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. (a) Translate as *literally* as possible :—   10

וְנִגַּשׂ הָעָם אִישׁ בְּאִישׁ וְאִישׁ בְּרֵעֵהוּ יִרְהֲבוּ הַנַּעַר בַּזָּקֵן
וְהַנִּקְלֶה בַּנִּכְבָּד : כִּי־יִתְפֹּשׂ אִישׁ בְּאָחִיו בֵּית אָבִיו שִׂמְלָה
לְכָה קָצִין תִּהְיֶה־לָּנוּ וְהַמַּכְשֵׁלָה הַזֹּאת תַּחַת יָדֶךָ : יִשָּׂא בַיּוֹם
הַהוּא לֵאמֹר לֹא־אֶהְיֶה חֹבֵשׁ וּבְבֵיתִי אֵין לֶחֶם וְאֵין שִׂמְלָה
לֹא תְשִׂימֻנִי קְצִין עָם : כִּי כָשְׁלָה יְרוּשָׁלַם וִיהוּדָה נָפָל כִּי־
לְשׁוֹנָם וּמַעַלְלֵיהֶם אֶל־יהוה לַמְרוֹת עֲנֵי כְבוֹדוֹ : הַכָּרַת פְּנֵיהֶם
עָנְתָה בָּם וְחַטָּאתָם כִּסְדֹם הִגִּידוּ לֹא כִחֵדוּ אוֹי לְנַפְשָׁם כִּי־
גָמְלוּ לָהֶם רָעָה : אִמְרוּ צַדִּיק כִּי־טוֹב כִּי־פְרִי מַעַלְלֵיהֶם יֹאכֵלוּ :
אוֹי לְרָשָׁע רָע כִּי־גְמוּל יָדָיו יֵעָשֶׂה לּוֹ : עַמִּי נֹגְשָׂיו כִּעוֹלֵל
וְנָשִׁים מָשְׁלוּ בוֹ עַמִּי מְאַשְּׁרֶיךָ מַתְעִים וְדֶרֶךְ אֹרְחֹתֶיךָ בִּלֵּעוּ :
נִצָּב לָרִיב יהוה וְעֹמֵד לָדִין עַמִּים : יהוה בְּמִשְׁפָּט יָבוֹא
עִם־זִקְנֵי עַמּוֹ וְשָׂרָיו וְאַתֶּם בִּעַרְתֶּם הַכֶּרֶם גְּזֵלַת הֶעָנִי בְּבָתֵּיכֶם :
מַלָּכֶם תְּדַכְּאוּ עַמִּי וּפְנֵי עֲנִיִּים תִּטְחָנוּ נְאֻם־אֲדֹנָי יהוה צְבָאוֹת :

(b) Parse the following and explain anything unusual in their
form :—   7

נִצָּב ; בִּעַרְתֶּם ; בָּתֵּיכֶם ; לְכָה ; כִּחֵדוּ ; יֹאכֵלוּ ; יֵעָשֶׂה ;

(c) What is the Daghesh Forte Conjunctivum ?   Give an example
of its use.   3

2. Translate :—
    30

(a) וַיהוה גָּלָה אֶת־אֹזֶן שְׁמוּאֵל יוֹם אֶחָד לִפְנֵי בוֹא־שָׁאוּל
לֵאמֹר : כָּעֵת מָחָר אֶשְׁלַח אֵלֶיךָ אִישׁ מֵאֶרֶץ בִּנְיָמִן וּמְשַׁחְתּוֹ
לְנָגִיד עַל־עַמִּי יִשְׂרָאֵל וְהוֹשִׁיעַ אֶת־עַמִּי מִיַּד פְּלִשְׁתִּים כִּי

רָאִיתִי אֶת־עַמִּי כִּי בָּאָה צַעֲקָתוֹ אֵלָי : וּשְׁמוּאֵל רָאָה אֶת־
שָׁאוּל ויהוה עָנָהוּ הִנֵּה הָאִישׁ אֲשֶׁר אָמַרְתִּי אֵלֶיךָ זֶה יַעְצֹר
בְּעַמִּי : וַיִּגַּשׁ שָׁאוּל אֶת־שְׁמוּאֵל בְּתוֹךְ הַשָּׁעַר וַיֹּאמֶר הַגִּידָה־
נָּא לִי אֵי־זֶה בֵּית הָרֹאֶה : וַיַּעַן שְׁמוּאֵל אֶת־שָׁאוּל וַיֹּאמֶר
אָנֹכִי הָרֹאֶה עֲלֵה לְפָנַי הַבָּמָה וַאֲכַלְתֶּם עִמִּי הַיּוֹם וְשִׁלַּחְתִּיךָ
בַבֹּקֶר וְכֹל אֲשֶׁר בִּלְבָבְךָ אַגִּיד לָךְ :

(b) כִּי יָעַצְתִּי הֵאָסֹף יֵאָסֵף עָלֶיךָ כָל־יִשְׂרָאֵל מִדָּן וְעַד־בְּאֵר
שֶׁבַע כַּחוֹל אֲשֶׁר־עַל־הַיָּם לָרֹב וּפָנֶיךָ הֹלְכִים בַּקְרָב : וּבָאנוּ
אֵלָיו בְּאַחַת הַמְּקוֹמֹת אֲשֶׁר נִמְצָא שָׁם וְנַחְנוּ עָלָיו כַּאֲשֶׁר יִפֹּל
הַטַּל עַל־הָאֲדָמָה וְלֹא־נוֹתַר בּוֹ וּבְכָל־הָאֲנָשִׁים אֲשֶׁר־אִתּוֹ
גַּם־אֶחָד : וְאִם־אֶל־עִיר יֵאָסֵף וְהִשִּׂיאוּ כָל־יִשְׂרָאֵל אֶל־הָעִיר
הַהִיא חֲבָלִים וְסָחַבְנוּ אֹתוֹ עַד־הַנַּחַל עַד אֲשֶׁר־לֹא־נִמְצָא שָׁם
גַּם־צְרוֹר : וַיֹּאמֶר אַבְשָׁלוֹם וְכָל־אִישׁ יִשְׂרָאֵל טוֹבָה עֲצַת
חוּשַׁי מֵעֲצַת אֲחִיתֹפֶל וַיהוה צִוָּה לְהָפֵר אֶת־עֲצַת אֲחִיתֹפֶל
הַטּוֹבָה לְבַעֲבוּר הָבִיא יהוה אֶל־אַבְשָׁלוֹם אֶת־הָרָעָה :

3.   Render the following into Hebrew :—   5

   (a) And he again did so.

   (b) And they spake one to another.

4.   (a) Explain the form לֵאמֹר   6

   (b) What is the use of the substantive verb אֵין ?

5   (a) Account for the difference in the form of the plural of הַר   6
(hill) and of עַם (people).

   (b) What is the pointing of the particle לְ with nouns and with
infinitives ?

6.   *Either*, (a) Parse and explain the following forms :—   8

יַגִּיד ; קַחַת ; יִקְחוּ ; תֵּן ; גֶּשֶׁת

Or, (b) Point the last four words in Question 1 (a) and remark on
the peculiarities.

7. (*a*) Translate into Hebrew:—   25

And behold this day I am going in the way of all the earth, and ye

know in all your heart and soul that not one thing hath failed (נָפַל)

of all the good things which the Lord your God spake concerning
you; all are come to pass for you and not one thing hath failed
thereof. Therefore it shall come to pass that as all good things are
come upon you which the Lord your God promised you, so shall the
Lord bring upon you all evil things.

(*b*) Write in Hebrew an account of the incident of Cain and Abel

SYRIAC

Paper-setter and Examiner—A. H. HARLEY, ESQ., M.A.

COMPULSORY PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate :—   **8**

ܡܥܕܟܠܘܢ ܘܠܐܡܪ. ܘܦܣܡ ܠܡܙܥܕܘ ܘܗܠܣ ܠܚܕܟܠܪܕܕܘ. ܐܠܐ
ܘܐܡ ܐܗܙ ܐܝܠܐ ܠܚܡ، ܐܣܕܗ ܠܚܕܟܠܪܕܚܬܡܘ، ܘܕܢܗܗ ܠܚܡܥ ܘܠܠܝ
ܠܚܡܘ، ܗܕܚܘܪܗ ܘܡܗܙ ܠܚܡܥ ܘܗܡܢܐ ܠܚܡܘ، ܘܪܝܕܗ ܠܚܠܐ ܐܠܚܡ
ܘܘܚܙܣܥ ܠܚܡܘ، ܚܡܠܝܙܐ، ܘܘܦܘܩܡ ܠܚܡܘ،. ܠܡܚܠܐ ܘܠܐܗܗܡܘ، ܠܚܠܩܘܒ
ܘܐܚܘܡܘ، ܘܚܡܗܣܐ. ܗܗ ܘܥܗܪܣ ܡܥܡܘܗ ܠܚܠܐ ܠܝܠܐ ܗܠܠܐ ܕܬܡܐ
ܘܗܡܣܐ ܗܕܠܝܗܗ ܠܚܠܐ ܡܐܬܠܐ ܘܗܠܠܐ ܠܚܩܠܐ. ܐܝ ܚܡܪܙ ܡܣܚܡ ܐܝܠܐܗ،
ܠܡܠܚܡ ܘܡܣܚܡ ܠܚܡܘ، ܡܗܠܐ ܐܝܚܐܠ ܐܡܠ ܠܚܡܘ،. ܠܐ ܗܐ ܐܗ ܡܩܗܡܐ
ܗܗ ܗܗܘܐ ܠܚܚܘܥ،. ܗܐܢ ܡܠܚܣܐܗ، ܕܡܠܚܡܠ ܘܐܣܬܡܗ، ܚܙܣܗܘ ܡܚܠܐ
ܡܠܚܢ ܠܚܚܘܥ ܐܝܠܐܗ،. ܠܐ ܗܐ ܐܗ ܡܩܗܡܐ ܗܗ ܗܐܘܐ ܠܚܚܘܥ ܗܗܗ ܗܗܡܠܐ
ܐܝܠܐܗ، ܚܡܚܙܐ ܐܡܠܐ ܗܐܚܘܡܘ، ܘܚܡܡܚܠܐ ܚܡܚܙܗ ܗܗ.

2. *(a)* Parse the verbs in Question 1.   **10**

    (b) What part of speech is ܚܚܣܡܗ ? How is this word **2**
used in Syriac ?

    (c) Parse ܠܚܚܕܟܠܪܕܚܬܡܘ،. What is the literal meaning **2**
of this compound ?

    (d) How is the English present participle rendered in **1**
Syriac ? ,

3. Translate as *literally* as possible :—   **9**

ܠܐ ܐܝܠܐܗ، ܐܚܘܚܡ ܐܚܘܡ ܘܚܠܐ ܐܚܚܠܐ ܚܬܣܡ ܐܠܐ ܡܪܘܐ: ܗܐ ܐܚܙ ܐܝܠܐ
ܠܚܡܘ، ܘܐܘܡܚܗ ܚܡܣܬܡܘ، ܗܣܠܩ ܐܚܚܠܐ ܘܣܗܐܗ ܗܚܠܝܡܗ ܠܚܣܡܪܐ ܚܡܥ

ܩܘܗ. ܘܐܝܠܐ ܐܣܪ̈ܐ ܐܝܢܐ̱ ܒܗܕ ܕܨܝܕ ܗܐܙܐ ܚܣܬܐ ܘܚܕܕܡ ܗܘܬܘܝܕܐ

ܗܣܪ̈ܘܐܐ ܐܨܒܐ ܣܘܗ̈ܝ. ܕܗܘܐ ܚܡܝܬ ܐܡܟܝܨ ܗܟܚܐܠ ܐܗܙܐܐ ܘܐܣܙܝܡ ܩܘܗ

ܐܝܠܐ ܘܐܣܙܝܡ ܣܪ̈ܝ. ܐܝܠ ܚܘܦܠܘܚܗ̈ ܚܥܒܝܪܘ̱ ܗܡܡ ܘܠܐ ܩܘܐ ܐܝܠܗ̈ܝ

ܠܐܩܗ̈ܝ. ܐܝܬܙܝܠܐ ܚܡܝܬ ܠܐܣܗ ܗܐܝܠܗ̈ܝ ܚܟܟܗ̈ܝ ܗܟܠܐ ܚܥܟܠܗܘܗ̈ܐ

ܩܘܐܣܗ̈ܝ.

4. (a) Remark on the expression ܩܘܗ ܗܡܝ.   2

   (b) Parse the word ܐܠܩܗ̈ܝ.   1

5. Translate :—   8

ܚܠܐ ܒܥܗ̈ܒ ܗܐܗܕܙ ܚܗܘܗ̈ܝ ܐܡܥܝ ܐܡܕܡܝ ܐܐܡܕܙ ܐܝܠ ܚܗܗ̈ܝ ܘܚܕܡܝ

ܐܝܠܗ̈ܝ ܟܗ ܠܐ ܩܘܐ ܗܟܗ̈ܠܐ ܘܣܐܒܠܗ̈ܝ ܐܗܠܐܐ ܐܠܐ ܐܗܚܟܗ̈ܝ ܚܣܥܠܐ

ܘܗܗܚܚܟܗ̈ܝ. ܠܐ ܐܗܟܣܗ̈ ܗܐܘܗܚܟܐ ܘܐܕܒܐ ܐܠܐ ܗܐܘܗܚܟܐ ܘܗܗܡܘܠܐ

ܚܣܬܐ ܘܚܚܕܚܡ. ܐܡܪܐ ܘܚܙܗ ܘܐܝܢܐ ܣܟܠܠܐ ܚܗܗ̈ܝ ܟܗܢܠܐ ܚܡܝܬ ܐܚܠ

ܣܠܡ ܐܚܗܐ. ܐܗܗܡܝ ܟܗ ܗܒܠܐ ܒܚܚܒ ܘܢܗܚܕܗܣ ܚܚܒܐ ܘܐܚܗܐ. ܚܒܠܐ

ܒܥܗܗܒ ܗܐܗܕܙ ܚܗܗܬܗܘܗܒܗ ܚܚܒܐ ܘܐܚܗܐ ܘܐܗܗܒܚܠܘ ܚܗܗܡ ܘܗܗܘ

ܗܒܗܐ. ܐܗܗܝܡ ܟܗ ܗܒܠܐ ܐܠܐ ܚܚܒ ܐܝܒܐ ܘܣܗܕܐ ܩܗܗܣܗܕܡ ܗܗ. ܗܒܠܐ

ܗܚܗ ܐܝܒܐ. ܐܚܗܗܬܡ ܗܝܝܒܠܐ ܐܗܚܗ ܗܣܗܒܗܝܗܠ. ܐܗܡܒܠܐ ܘܗܚܠܗܚ ܘܚܣܥܒܠܐ

ܗܡ ܗܗܚܒܠܐ ܣܗܘܗ ܚܗܗ̈ܝ ܚܥܗܐܠܗܝܠ.

6. (a) Parse ܡܚܡܡ. What is the usual signification of 2
this conjugation ?

   (b) Parse fully ܒܠܐܠܠ and ܒܗܣܗܡ.   2

   (c) What is the significance of preformative ܣܐ in 2
nouns like ܗܚܗܗܕ and ܗܚܗܗܒܠܐ.

7. Point the passage in Question 3 or Question 5.   10

8. (a) How is the genitive-relation between two nouns 2
expressed in Syriac ?

   (b) Attach possessive suffixes to the singular and the 5
plural of ܪܓܠܐ (foot) and ܐܪܥܐ (earth).

(c) Write out the imperative and infinitive Pe'al of 4 ܢܣܒ and �'

(d) Write out the perfect and imperfect Ethpe'el 5 of ܪܗܛ.

9. Translate into Syriac:—   25

(a) And now, O Lord God, thou art God and thy words are true, and thou hast promised this goodness unto thy servant: therefore now let it please thee to bless the house of thy servant that it may continue for ever before thee, for thou, O Lord God, hast spoken it; and with thy blessing let the house of thy servant be blessed for ever.

(b) Thou comest to me with a sword, but I come to thee in the name of the Lord whom thou hast defied. This day will the Lord deliver thee into mine hand, and I will smite thee and take thine head from thee.

(c) The men and the women of the city.

(d) The houses of the people of that place.

SYRIAC.

ADDITIONAL PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Trnslate *two* of the following :-

   (a)   10

ܗܢ̈ܝܐ ܘܡܫܪܬܚ ܥܠ ܟܝܢܬܪܘܡܘܣ ܐܚܪܢ ܫܡܝܐ ܘܗ ܘܚܟܕܐ ܘܕ ܡܠܟܐ
ܘܚܕܝܫ ܟܝܒܝܒܚܟܬ . ܒܥܠܐ ܘܒ ܒܪܠ ܚܢܬܝܚܥ ܘܙܝܒܝ ܚܠܐ ܘܗ
ܟܟܬܝܪܘܡܘܣ ܘܐܡܙ ܟܚܘܣ ܘܘܐ ܡܬܝܠܠ.ܟܚܘܡ.ܐ, ܐܣܘܐ܂ ܘܚܒܐ
ܚܚܙ.ܗ ܘܐܗܐ ܘܒܚܟܨ ܠܠܐ ܘ.ܐܣܩܘܣܘ ܘܘܐ ܥܒ ܨܪܝܒܙ . ܘܘܐܐ ܘܗ
ܘܒܣܒܐ ܗܝܙܐܠ ܠܐ ܚܚܬܢܐ ܚܪܡܚ . ܡܬܐ܂ ܘܐܙܐ ܡܚܟܟ܏ ܚܚܚܘܡܥ ܘܘܐܐ ܐܠܒ
ܡܣܬܐ ܐܠܒ . ܐܠܐ ܐܡܐ ܐܠܘܬ ܚܕܚܚܥ ܘܐܥ ܚܚܣܘܒܚܣܒ .

   (b)

ܡܟܚܘܡܐ܂ ܘܚܕܘܙܐ ܚܚܕܥܘ ܚܘ ܚܠܚܐ ܘܨܐܡܚ ܘܚܠܚܐ ܘܘܐܘܚܚܚܙ.ܐ܂ ܘܒܚܐ ܣܘܘ ܘܨܚܚܘܝܐܠ
ܐܣܙ.ܐܠ ܚܚܣܚ ܐܝܘܘ ܣܒܐ ܐܠܠ ܐ ܥ ܘܗ ܘܨܚܚܚܘܚ ܚܟܚ ܚܟܚܚܚܚ ܘ.ܝܝܐ ܚܠܠܐ
ܘܘܐ ܚܚܚܣܘܚܥ ܚܒܥܠܠ ܚܟܚ ܚܟܚܚܚܕܪܘܬܚܘ ܚܟܘܚܘܒ.ܐܠ.ܝܐ ܂ ܚܟܚܐܘܣ ܘܒܥ ܐܠܨܐ
ܐܢܬ.ܙܢܣܚܐ ܐܠ ܚܥ ܚܚܒ.ܢܚܚܚܚ ܚܠܠܐ ܘ.ܝܟܚ ܚܚܚܚܟܐܠ ܘܘܐ ܘܐܚܟܚ ܚܘܚ ܚܟܚܚܚܚܐ ܚܒ
ܚܝܙ.ܝ ܚܚܘܠܠ . ܚܚܚ ܣܒܐܠ ܚܘܘ ܚܚܚܐ ܘܠܠ ܘܘܐ ܘܠܠ ܘܘܐܐ ܘܥܨ ܚ ܒܚܚܘܠܠ ܐܘܠܠ ܚܟܚܚܪܘܡܘܣ
ܫܚܚܚܚ ܚܚܟܚܚ ܐܠܐܚܐ ܚܟܚ ܚܠܚܐܠ ܘ.ܠܚ ܚܚܕܚܝܢܣܘܡܪܚ ܘܨܚܚܚ ܘܘܐܐ ܚ ܗ
ܚܟܚܘܠ.ܐܠ .

   (c)

ܚܠܚ ܘ.ܥܥܐܠ ܒܥܚܐ ܘ.ܐܥܙ ܚܟܚ ܘ.ܥܥ ܣܒ ܚܚܚ.ܙ.ܐ ܚܚܚܝ ܚܟܚܚܚ܂ ܚܚܘܘܝ܂ ܚܚܟܪ.ܐ.ܝ
ܐ.ܝ.ܥܥ܂ . ܚܚ.ܗܥܠ ܘܘܐ ܐܢܐ ܚܚܚܚܚ ܣܥܘܨ ܚܟܚ܂ ܐ܂ܝܝܚ ܚܟܚ ܚܚ.ܗܥܠ ܘܘܐ.ܐܠ ܚܚ.ܗܥܠ ܘܚܚܚܘ ܚ܂ܝ
ܚܥ ܚܚ.ܝܟܐ ܐܠܠ ܚܥ ܐ.ܚ܂ܐܟܙ.ܐ ܘܘܣ . ܚܚܚ.ܝܚܚܚܕܥ.ܐ܂ ܘ.ܝܝܙܘ ܐ.ܝ.ܥܥ܂ ܚܙ.ܝܚ.ܐܐ .ܐ.ܝ.ܘܝ
ܚܙ.ܝܚܚܐ ܚܚ܂ܝܗܝ܂ ܚܚ.ܘܟ܂ܚܐ ܘ.ܒܚܚ.ܐܠ ܚܚ.ܗܥܠ ܚܚ.ܗܥܠܠ ܘ.ܠ ܘ.ܒܚ.ܗܙ.ܐ ܘ.ܚܚܚ.ܣܣ.ܐ ܘܘܚܚ.ܗܥܠ ܘ.ܒ.ܚܚ.ܗܥܠ ܚܟܚ
ܘܘܚܠܙ.ܝ ܐ.ܝ.ܥܥ܂ ܘ.ܝܚ.ܐܟ.ܘ ܚܙ.ܝܚ.ܐܐ ܐܣܟܚ.ܚܕܐ ܚܚ.ܗܥܘ.ܐ ܘ.ܒܚ.ܐܟ.ܐ . ܠܠ ܚ.ܘܘܣܘܥ ܚ ܚ 1.ܐܟ܂ ܘ.ܒ.ܠ.ܝ
ܚܚܚܚܚܚ ܚܚ.ܐܩ.ܐ ܐܠܠ ܘ.ܒ.ܠܠ ܚ.ܘ.ܠ.ܐ ܘ.ܝܘ.ܣ .

2. (a) Point and remark on the words underlined.   25

   (b) What is the construction after the verb ܐܚܕܒ ?

   (c) Write out the *perfect, imperfect* and *imperative* Piel of ܝܪܬ and ܩܘܡ , and Pael of ܡܠܠ

   (d) Attach pronominal suffixes to the *sing.* and *plur.* of ܐܒ (*father*).

   (e) Illustrate with examples the use of ܟܠ in the sense of "every", "whole", "all."

3. Translate into English :—   30

   (a)

ܡܢ ܕܒܥܐ ܕܢܚܠܡ ܐܚܣܡܝ ܐܚܣܡ ܡܚܝܕ ܘܝܘܡ ܐܝܠ ܘܝܕܠ ܘܕܠ ܡܝܡܕ

ܘܕܠ ܡܢܘ ܘܐܚܣܕܣܘܝ . ܐܝ ܘܢܕܚܝ ܗܝܚܝ ܘܚܢܝܠܠ ܟܡܝܙܠ

ܘܕܚܠܘܝ ܚܝܝܩܠ ܐܢܚܠܝ ܘܝܚܡܝ ܚܡܢ ܕܚܡܣܘܣܝ ܐܚܙ ܡܙܢܠ ܘܚܣܝ

ܘܚܠܝ ܕܚܕܚܣܝ . ܕܝܪܚܣܝ ܐܢܚܝ ܡܝ ܚܚܡܕ ܚܣܡܣܘܝ ܘܠܚܝ . ܡܕܠܠ

ܕܝܙܘ ܐܕܐ ܐܡܙ ܐܕܐ ܘܠܐ ܢܣܘܣܝ ܗܣܚܝ ܠܐܚܠܝ ܘܡܝ ܚܝܩܠ ܚܐܚܣܚܝ

. ܠܚܠ ܚܚܠ .

   (b)

ܐܘ ܢܚܚܡ ܘܝܘܝ ܠܚܚܝ

ܚܝܡܩܠ ܠܝܡܕܚ ܠܐ ܙܚܘܚܡܚܝ

ܘܚܙܚ ܚܚ ܘܝܢܠ

ܘܢܙܘܙܝ ܢܝܡܝܙܐ ܚܚܙܙܘܚܝ .

ܚܢܚܩܠ ܘܚܚܢܚܩܠܐ

ܘܚܚܚܚܝ ܚܚܝܚܣܝ ܚܠܚ ܣܚܚ .

ܘܠܠ ܚܚܚܚ ܚܠܐ ܚܚܚܚܝ

ܘܚܚܚܙܢܝ ܚܝ ܚܚܚܝ ܚܚܚܙܝܠ

4. Point *passage* (a) in *question* (3).   10

5. Translate into Syriac :—   25

   (a) I will arise and go to my father and will say unto him, Father, I have sinned against heaven and before thee, and am no more worthy to be called thy son.

   (b) O Lord God, the word that thou hast spoken concerning thy servant and his house, establish it for ever, and do as thou hast said. And let thy name be magnified for ever, saying, The Lord of hosts is the God over Israel; and let the house of thy servant David be established before thee.

ARMENIAN.

Paper-setter and Examiner—M. J. SETH, ESQ.

COMPULSORY PAPER.

The figures in the margin indicate full marks.

1. Translate into English :—   25

(a) Իբր եւ եւս մեր մատուած [ժ]է բազմացան զորեք մարունին ի վերայ երկրի, սարչացաւ զի արար զմարեն և աւէ, չնչեցից զումի· նայն մարմին զոր արարի, մի ծնացէ ոգի եւմ ի մարունին այդումիկ, վասն լինեդոյ ռոգա մարմին։ բայց ՝նո, այլ արւար կատարբալ ճաձոյ երկ մատոււծայ : ԱԱնէ մէրը առատուած ցնոյ, ժամանակ ամինայն մարուա Հատեալ է, զի լ,գաւ երկիր ապականութեամբք ի նայանէ և աձա եռ ապականիցից զնոսա եւ զերկիր : ԱԱրդ արա դու քէչ ապաստ ի զորեքկուսի փայտից, խորշ խուիշ լըրծեցեր լըստպանն եւ նաւթիւ ձիփերցես զնա ներքոյ եւ արտաքոյ : ,

(b) Ի,Հար մէր զմանուկն ի Հիւանդացու : Խնդրեռակ, Դաւեթ յԱստուածոյ վասն մանկանն, պաչչեռ պաֆն եւ անկաւ ի վերայ գետնոյ : Եւ յարեան ի վերայ Նորածառաայէ տանն յարուցանեիչ զնա եւ ոլ խամքր յաունիլ ի գետնսյն, եւ ոլ եկեր ընդ նոսա Հաց : Եւ եղե յաւուրն եւթերարգի միւսանեբ մանկանն եւ երկեան ծառայքն զուժլիի պատմիլ նմա· երեա գաւիժ եւժէչ ընզէն ՝ծառայք նորա եւ իմայաւ երժէ միւսաւ մանումին. յարեաւ ի գետնոյն, լւուգաւ եւ օծաւ, փոխեաց զծութերձէր, եւ եմուտ ի տունն Աստուածոյ եւ երկիր եդաք նմա :

   (c) What parts of speech are the words underlined in the above passages ?   12

(a) Write short notes on the following in classical Armenian :—   13

    Աու բազբեգոր լուսաւմխիչ.

    Աուբք մեսխւ[ք մրագոզ :

2. (a) Decline :—

    Դիր, Զուր, Հոտ, քուն, եկեղեցի :

(b) Conjugate :—   5

    ուսանիմ, ուտեմ, պանամ .

(c) Correct the following :—   15

Ց*ՅեմնապկուԹուն *ևորՀուպա եղեւլ ամ 1605 աւսւրն Հահ Աբբաո արբաՀիւ ապրնց և նոր Թլական բացալ վաոն հախինալ մին այլավազ զի զատ զատ[եալ անուռւրուԹեն նռոս :

3.   Translate into classical (գրաբառ) Armenian :—   25

(a) The Armenians are the only Christian nation in Asia, the Armenian nation was the first to become Christian.

(b) It is this nation which seems to be specially marked out to become in time the pioneers of civilization and religion.

(c) We search in vain the faded pages of Sanskrit writers and Muhammadan chroniclers of ancient times for any reference to this enterprising commercial people in India.

(d) The wise man practises humility—the bough laden with fruit bends its head to the earth.

ARMENIAN.

ADDITIONAL PAPER.

The figures in the margin indicate full marks.

1. (a) Translate into English :—   10

Ա ամբարգի ոմն Ճանապար Հորւեալ եկն ընւնւոյն աււնոված, և տեռեալ զնա վթացաւ, և մատուցեալ պատեաց զվէր նորս արբեալ ի վերայ ձէԹ և գինի. և եւեւ ի վերայ գրատուււ ի-րայ ածt զնա ի պանուոկի մի և ռւպ՟մանեաց զնա :

(b) Give the meanings of the following words in English ;—   10

Աւեվ, Թախիլ, ՃորՃ, Հեյւահի, Ճահ, ախգււ, ււղեկից :

2. Translate into English :—   30

Իչ եղեա ի մանանչ աււոմ, ընւ ււււայ իրս ննա կոււնեւխա, անկեալ աււ ամն նորա երկիր պատ՟անէր : Եւ պեռոււս կանգնեաց զնա և մաւ. Ցոռ կաց և եռ ինչն մարւ խՎ : Եւ խառեշալ ընւ նմ՟ ի ււււ ի նիռբ և գւաներ անւ ժողուեալ գբագււՎ: Եւ ամ չնռս. Դււ եռբնու գխեբ ոպե այնմարԹեան Հւեի Հպել կամ միրՀենւ աււ այլանգ և ինշ Աււււած եռայց մի զւբ խառնակ կամ անսււրբ աււել ի մարգկանէ :

3. Construct short sentences to illustrate the use of the following 25
words in classical Armenian :—

Ցորմ Հեռ, ընս ոււււ, յագագ, ի չնորՀ, յերևռց, ի ււրգանս. ի նախատինս, այս ամինայիււ :

4. Translate into classical Armenian : — 25

It would be difficult, perhaps, to find the annals of a nation less stained with crimes than those of the Armenians, whose virtues have been those of a peace and their vices those of compulsion. But whatever may have been their destiny—and it has been bitter— whatever it may be in future, their country must ever be one of the most interesting on the globe, and perhaps their language only requires to be more studied to become more attractive. If the Scriptures are rightly understood, it was in Armenia that Paradise was placed.

CLASSICAL TIBETAN.

Paper-setter—MAHAMAHOPADHYAYA DR. SATISCHANDRA VIDYA-BHUSHAN, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *two* of the following passages into English : — 15

(a) དགེ་སློང་དག་སྟོན་བྱུང་བ་འདས་པའི་དུས་ན་མཆོད་ཞིག་གི་འགྱམ་ན་ཤིང་བེམ་བའི་ཚལ་ཡོད་དེ། ཤིང་བེམ་བའི་ཚལ་དེ་ནེ་བོང་དུག་ཅིག་གནས། ཤིང་བེམ་བའི་ཚལ་དེ་ནས་ཤིང་བེམ་བ་ཞིག་མཆོའི་ནང་དུ་ཟིབ་པ་ན་སྐྱ་ཐལ་ཅེས་ཟེར་བ་བྱུང་ངོ་། རེ་བོང་དུག་པོ་དེ་དག་གིས་སྐྱ་ཐོས་ནས། དེ་དག་ཡུས་ཆུང་བས་སྐུག་སྟེ་འབྲས་པར་བརྩམས་སོ། དེ་དག་འབྲོས་པ་ཕ་དག་གིས་མཐོང་ནས་དེ་དག་གིས་སྐྱས་པ། ཤེས་ལྟན་དག་ཅི་ཕྱིར་འབྲོས། རེ་བོང་དག་གིས་སྐྱས་པ། ཅལ་ཅལ་ཟེར་བ་བྱུང་ངོ་། དེ་ནས་སྟེ་དེ་དག་གིས་ཀྱང་འབྲོས་པར་བརྩམས་སོ་ ॥ །

(b) དེའི་ཚེ་ན་མི་དེའི་ཆུང་མ་བདག་གིས་སྤྱོན་སྲིག་པ་ཅི་ཞིག་བྱས་ན། ཁྱིམ་ཐབ་སྲང་སྟེ་འདི་འདུ་བར་སྒྱུན་ཁང་དུ་བཅུག་ནས

ཅི་མ་དང་རྒྱ་བ་ཚམ་ཡང་བསྒྱུར་མེད་དེ་མི་གཞན་ཡང་མི་མཐོང་
སྐྱམ་ཞིན་དུ་མི་དགའ་ནས་ཡང་འདི་སྐྱམ་དུ་བསམས་སོ། ། སངས་
རྒྱས་བཅོམ་ལྡན་འདས་འཇིག་རྟེན་ན་བཞུགས་ཏེ་སེམས་ཅན་གང་
ཕྱུག་བསྒྱལ་གྱིས་གདུངས་པ། དེ་དག་གི་མགོན་དང་སྐྱབས་མཛད་
དེ་ཐར་པར་མཛད་དོ་ཞེ་ན། བཅོམ་ལྡན་འདས་ལ་བདག་རྒྱང་མ་
ནས་ཕྱག་འཚལ་ལོ། ཕྱགས་བརྗེ་བར་དགོངས་ཏེ་བདག་གི་མ་ཉེན་
དུ་མཛོན་སྨམ་དུ་གཤེགས་ཞིང་བདག་ལ་ཆུང་ཟད་ཚམ་ཞིག་ཞལ་
སྟོན་པར་ཅི་མ་ཅུང་སྐྱམ་དུ་བསམས་སོ ॥

(c) དེའི་སང་ཅིན་རྟིན་པོ་གཞན་རྣམས་གཅིག་གིས་ཀྱང་དཀ་
གོ་ཞིང་། རྟིན་པོ་སྐྱང་ཆེན་བཞིན་པ་པོས་ཁོ་རང་གི་པོ་ཕྱུག་གིས་
བཕད་པ་བཞིན་རྒྱལ་པོ་ལ་ཞུས་པས། དེ་ནས་རྒྱལ་པོའི་བྲིམས་
ཨིགལ། ཨོ་རོག་གི་ཆུང་མ་དེ་གཅིན་རྒྱབ་པའི་ཨོ་རོག་དེ་རང་
གིས་ཕྱིབ། སྟོད་རོགས་དེ་ལ་མི་ཕྱིབ་ཟེར་ཞལ་ཆེ་གཅོད་པ་ན།
ཨོ་རོག་གསམ་ཕྱིགས་སུ་ཨོད་པ་དེ་དང་བར་དུ་ཨོད་པ་དེ་ཕྱིགས་
གཅིག་དུ་འཕྱུར་ནས་སོང་ངོ། གཨོན་དུ་ཨོད་པའི་བྱ་དེ་ཁོ་རང་
གཅིག་པོ་ཕྱིགས་གཞན་རུ་དུ་འཕྱུར་ནས་སོང་ངོ། དེ་ནས་རྟིན་པོ་དེ་
ལ་ཆང་མའི་ནང་ནས་གོ་ས་ཆེན་པོ་ཐོབ་བོ ॥

Parse འརྒྲུས་པར in (a) in the above. Conjugate the root of $\hat{\text{s}}$ན་པ in (b) in the present and past tenses third person singular number. Decline རྒྱལ་པོ in (c) in the instrumental and ablative cases.   7

2. Translate the following into English :— 10

གཞན་གྱི་ཚིག་གིས་མཚོན་བ་ཉེས་མི་སྲུང་ཞིང་ །

གཞན་གྱིས་སྐྱེས་པ་དགའལ་བཏག་པར་བྱ །

འབྲིད་པར་འདོད་པ་སྐབས་ཚོལ་བྱེད་པས་ན །

སྐྱེ་བོ་ཕྲ་མ་ཚན་ལ་ཡོད་མི་སྟོན ॥

ཕྲ་སྐྱེས་གྱོང་བ་བཙུད་དུ་སྐྱ་བྱེད་པ །

མཚོན་བ་ཉེས་འབྲིད་པར་བྱེད་པ་སྐྱེས་དུ་རེ །

ཕྲ་མ་སྨྲ་བ་དེ་ནི་བསད་གྱུར་ནས །

བདེ་བས་མཚོན་བ་ཉེས་དགའ་བར་བྱེད་པ་སྟེ ॥

3. Give in English a summary of *one* of the following stories :— 8

(a) ཚིག་ཅུབ་འཚ་པ་སྐྱེས་པ་དང་ ། ཚིག་འཛམ་བཟང་པོ་

སྐྱེས་པ་གཉིས་ཀྱི་ཉིས་དཀྱིགས་འཕྱམ་དུ་བྱུང་བ་ནི །

(b) བྱ་བདུན་གྱིས་པ་བསྐྱད་པ །

4. Enumerate the sixteen rules laid down by King Srong-tsan- 10
gam-po referred to in the following :—

རྒྱལ་པོ་སྲོང་བཙན་སྐྱམ་པོས་མི་ཚོས་གཅང་མ་བཅུ་དྲུག

གི་ཁྲིམས་བཅས་པར་མཚད་པ་ནི་འདི་ལྟར ॥

5. (*a*) Give the meanings of the following words and phrases, and 10
frame sentences in Classical Tibetan to illustrate them :—

བར་དུ ; མ་ཚ ; ག་གནི ; ཅི་ཞིག་ན ; ཅིག་བོ་རྒྱབ་མཁན ;

ངས་པ་ཉིད ; and མོས་མེད

(*b*) Turn the following into Classical Tibetan :—This woman is 7
indeed pretty. From among all. As far as I know, that is so.
Whosoever shall humble himself shall be exalted. That same gentle-
man will employ you. They have gone in company with one another.
Have you seen the Treaty that was signed at Lhasa ?

6. Give the substance of the following in English :— 8

ཆོས་རྣམས་སྟོན་དུ་ཡོད་འགྲོ་ཡོད་གཙོ་ཡིན།

ཡོད་མགྱོགས་རབ་དུ་དང་བའི་སེམས་ཀྱིས་དེ།

སྐྱེས་སམ་བུས་ན་དེ་ནས་བདེ་བ་དེ།

འཕོབ་འགྱུར་གྱི་བ་མ་ཡོལ་བར་མི་འགྱུར་བཞིན །

7. Translate the following into Classical Tibetan :— 25

As a rule a great many camels, with their drivers, cross the desert together. This is called a caravan. The camel has a keen sense of smell. Often when a whole caravan is nearly dead with heat and thirst, the camel scents water from afar. It is then left to guide itself ; and, to the joy of the driver, will lead him to a spring. Almost dead with thirst, and faint and weary, the Arab sees the water. He knows that his life is saved by means of his faithful camel.

CLASSICAL TIBETAN.

ADDITIONAL PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate the following into English :— 10

ནམ་ཞིག་མཉེར་ཡོད་ཀྱི་ཚོང་པ་རྒྱ་མ་ཚོར་གཟིངས་བདང་ནས་

སིདྡྷ་ལར་སྐྱེབས་པ་འགགས་མཆན་མོ་འི་གཱཏིད་གྲོ་རངས་སད་ནས །

ངལ་གསོས་དགའ་བའི་སེམས་ཀྱིས་བཙས་ལྟར་འདས་ཀྱིས་

གསུངས་བའི་ཆོས་སྒྱུ་ རྟ་སྦྲངས་པས ། པོ་བྲང་དང་དུ་སྐུ་དིག་འཁྲི་

ཤིང་གི་ཐོས་ནས་ཚོང་པ་རྣམས་བཀུག་སྟེ་ཙི་ཡིན་རྡེས་པས ། འདི་

དག་སངས་རྒྱས་བཚོམ་ལྡན་འདས་ཀྱིས་སེམས་ཅན་ལ་ཐུགས་བརྩེ་

བས་གསུངས་པ་ཡིན་ཞིས་སངས་རྒྱས་ཀྱི་ལོ་རྒྱུས་ཞིབ་དུ་བཤད་

པའི་ཚོ། སངས་རྒྱས་ཀྱི་མཚན་དེ་ཐོས་པ་ཅིག་གིས་སྤྱོད་ཀྱི་བག་

ཆགས་སད་ནས་ཉ་ཕྲུའི་ཟུ་མོ་འབུག་གི་ཪྩ་ཕྱོས་པ་བཞིན་དགའ་

ཞིང་། ལུས་བདྲ་གཡོ་ཪིས་འགུལ་མི་ཤེས་པ་བྱུང་། དེར་མོས་

བཅོམ་ལྡན་འདས་ལ་ཉུ་ཡིག་ལོགས་པར་ཚོང་པ་རྣམས་ལ་བསྐུར་རོ॥

2. Give in English a summary of— 10

ཁྲིམས་བདག་དཔལ་སྐྱེས་ཀྱི་ཏོགས་བཙོད།

3. (a) After what letters are the suffixes གོས་ and ཀྱིས་ used ? 4

(b) Illustrate in Classical Tibetan *two* of the following :—a 2
demonstrative pronoun, an impersonal pronoun, and an indefinite
pronoun.

(c) Conjugate the root of གཏོང་བ in the present, past, and future 6

tenses, indicative mood, third person singular number. What is the
form of this root in the imperative mood second person singular
number ?

4. (a) Name the five prefixes in Classical Tibetan. 2

(b) How is the subjunctive mood formed in Classical Tibetan ? 4
Give examples.

(c) Give equivalents, in Classical Tibetan, of the following :— 7
once more, yet, eventually, everywhere, consequently, punctually,
diligently, perhaps, and by no means.

5. Translate *two* of the following extracts into English :— 30

(a) ཧཱ་གཅིག་ཀྱང་ལུབ་ཀྱིས་ཕུག་ནས་འཇུས་ཤིང་འཕྲལ་མི་

ཕོད་པ་ལྟར་ཡོད་པ་ན་ཡང་། བོད་དུ་འགྲོ་དགོས་པར་དགོངས་དེ

ཧཱ་གཅིག་ལ་ཇོང་བསམ་གྱིས་མི་ཁྲབ་པ་མཛད་དོ། འབུ་སྐྲ་སྐྲ་

ཚོགས་ཀྱི་ས་བོན་ཡང་བསྐྲམས། དེ་ནས་ཤིང་ཏ་ལ་བོར་ལའི་སྡིང་

དུ་ཏོ་བོ་ལྗུ་བཅུགས། འཁོར་ལོ་དེ་རྒྱ་ནག་ར་སྤྱོབས་ཆེ་བའི་གུད་

ཧཱ་དགའ་རང་སྐྱུ་དགའ་གཉིས་ལ་འདྲེན་དུ་བཅུག། གཞན་ཡང་

རིན་པོ་ཆེ་དང་། དར་དང་། གོས་དང་། རྒྱན་དང་། འཕྲལ

ཀྱི་ཡོ་བྱད་རྣམས་བཀལ་བའི་ཀ་དང་རེིའུ་ཇ་མོ་ལ་སོགས་པ་མང་པོ་
བཙོངས་ཏེ། ་ ་ བོད་སློན་རྣམས་ལའང་སྟོན་མོ་གནང་སྦྱིན་དཔག་ཏུ་
མེད་པ་མཛད་དོ །།

(b) ཡིན་དུན་མེད་པའི་ཚོགས་ཀྱི་སློབ་དཔོན་ལས། ་ ་ ཤེས་
རབ་ལྡན་པའི་བྱ་སློབ་བྱས་ན་འཚོངས། ་ ་ ་ མི་ཉག་ཁ་འདུས་མང་
པོ་འི་དཔོར་ལས། ཡ་རབས་བཅའ་སྤྱོད་ལྷན་པའི་གཡོག་པོ་སྤྱེད།
ལང་ཤོར་ཀྱུན་པོ་མི་ཡི་ཆུང་མི་ཚུད། ་ ་ ་ བློ་གྲོས་ཟབ་དང་མགོ་
འཕྲམས་ནོར་ས་ཡོད། ་ ་ ་ བླང་རྒྱང་མི་དང་པོ་གྱུང་ནོར་ས་ཡོད།
རང་བཞིན་བཟང་དང་མདོ་མེད་ནོར་ས་ཡོད། ་ ་ ་ རྡུང་པོའི་མི་དང་
སྐྱེན་པ་ནོར་ས་ཡོད། ་ ་ 'ཆུལ་འཆོས་ཅན་དང་བཅུན་པ་ནོར་ས་ཡོད།
ཚོ་སློས་ཐོངས་དང་ཟྲིག་པོ་ནོར་ས་ཡོད། ་ ་ བརྒྱ་བག་ཅན་དང་མཁས་
པ་ནོར་ས་ཡོད །།

(c) ཡང་བྱ་ཆེན་ཁ་ལྦུག་གིས་ཞལ་ནས། ་ ་ ད་རང་རེ་རྣམས་
གནས་སྐབས་སུ་འཛོམས་པ་འདི། ་ ་ ཕིམས་ཅན་སྒོ་ཞིང་སྐྱེད་དུ་
ཚོར། ཚོས་ཀྱི་གཏུམ་འཕེལ་བས་ལས་འཕྲས་བཟང་། ་ ་ སང་པོད་
དོར་བླ་ལྷ་པའི་ནང་དུ་ཡང་ལྱུང་གི་ཐུབ་ཆེན་པོ་ན། ་ ་ ས་བཅུད་ལ་
འཕེལ་འདུས་ཡོང་བས། ་ དེའི་ནུས་བོད་ཕུ་རྣམས་དང་མཐལ་ཕུད་
བྱེད། ་ ་ དེའི་བར་ལ་ཕམས་ཅད་ཁམས་བཟང་། ་ ་ ད་ནས་ཚོས་ཀྱི་བློ་
དང་མ་བྲལ་གྱིས། ་ ་ འདིར་མཉྲིབས་པའི་བྱ་ཕྱུན་དང་བྱིའུ་རྣམས་ལ་
ཚོས་དང་མཐུན་པའི་བསླབ་བྱ་གྱིས་ཤིག ་ ་ ཅེས་གསུངས་སོ །།

6. Translate the following into Classical Tibetan :— 25

(*a*) A dog had stolen a piece of meat out of a butcher's shop, and was crossing a river on his way home, when he saw his own shadow reflected in the stream below. Thinking that it was another dog, with another piece of meat, he resolved to make himself master of that also ; but in snapping at the supposed treasure, he dropped the bit he was carrying, and so lost all. Grasp at the shadow and lose the substance—the common fate of those who hazard a real blessing for some visionary good.

(*b*) A certain man had the good fortune to possess a goose that laid him a golden egg every day. But dissatisfied with so slow an income, and thinking to seize the whole treasure at once, he killed the goose ; and cutting her open, found her just what any other goose would be !

BENGALI.

(*For Female Candidates.*)

Paper-setters— { RAI SAHEB DINESCHANDRA SEN, B.A.
{ BABU JOGINDRANATH BASU, B.A.

Examiners— { BABU JIBENDRAKUMAR DUTTA.
{ SRIMATI GIRINDRAMOHINI DASSI.

COMPULSORY PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into English :—

(a) কুন্তী কহিলেন, "হে ব্রাহ্মণ ! আমি যে পুত্রকে রাক্ষস সমীপে 10 প্রেরণ করিব, রাক্ষস কখনই তাহাকে বিনাশ করিতে পারিবে না। আমার সেই পুত্র অতিশয় বলবান্ ও সাহসী। সে নিশ্চয়ই তাহার হস্ত হইতে আত্মরক্ষা করিয়া প্রত্যাগমন করিবে। আমি স্বচক্ষে তাহার বিক্রম দেখিয়াছি ; অনেক বলবান্ রাক্ষস সেই পুত্রের সহিত সংগ্রাম করিয়া মৃত্যুমুখে পতিত হইয়াছে।

(b) এক দিন জর্জ্জের পিতা তাহাকে একখণ্ড ক্ষুদ্র কুঠার দিয়াছিলেন। 10 জর্জ্জ কুঠার পাইয়া একান্ত আনন্দিত হইলেন, এবং বাগানে গিয়া ছোট ছোট গাছ কাটিয়া উহার ধার পরীক্ষা করিতে লাগিলেন। তাহার পিতা অনেক যত্নে একটি চেরী গাছের চারা ইংলণ্ড হইতে আনয়ন করিয়া স্বীয় উদ্যানে রোপণ করিয়াছিলেন। জর্জ্জ উহা কুঠারাঘাতে কাটিয়া ফেলিলেন।

(c) সক্রেটিসের একজন শিষ্য দুঃখ প্রকাশ করিয়া বলিয়াছিলেন,   10
" অবশেষে বিনা অপরাধে আপনি মৃত্যুদণ্ডে দণ্ডিত হইলেন।"
সক্রেটিস কহিলেন, " তোমরা কি চাও যে আমি অপরাধী হইয়া
প্রাণত্যাগ করি ?" যখন কারাধ্যক্ষ তাঁহাকে বিষপাত্র প্রদান
করিলেন, তখন তিনি কারাগারমধ্যে শিষ্যগণের সহিত ধর্ম্মালোচনায়
প্রবৃত্ত ছিলেন। সক্রেটিস স্বহস্তে বিষপাত্র উত্তোলনপূর্ব্বক নিঃশেষিত
করিলেন।

2. Turn into prose :—   6

(a) তবে দ্রোণ লক্ষ্য দেখি জলের ছায়াতে।
অপূর্ব্ব রচিল লক্ষ্য দ্রুপদ নৃপতে ॥

(b) আর কি এ পোড়া আঁখি এ ছার জনমে
দেখিবে সে পাদুখানি—আশার সরসে
রাজীব, নয়নমদি

3. Parse the words underlined in the above extracts, and explain   4
আশার সরসে in extract (b).

4. Give some instances of the magnanimity and kind-heartedness   9
of Judhisthir, and of the truthfulness of George Washington as a
boy.

5. Give a brief account of শম্বুক as related in the Uttara Rama   9
Charita, showing in what respects this story differs from the legend
to be found in the Ramayana.

6. Explain the allusions in the following lines :—   5

(a) তুমি মা অভাগী অনাথা দুর্ব্বলা '
ভজন পূজন যোগ মুগধা।

(b) দেখাও জননী ধরিলা গো যত
রিপু পদচিহ্ন ললাটভাগে।

7. Expound the samāsas in ভজন পূজন যোগ মুগধা and ললাটভাগ.   2

8. Correct all errors in the following extract :—   11

এই দেশের যাবতীয় লোকগণ একত্র হইয়া একদিন ম্যাজিষ্ট্রেট
সাহেবকে বলিল " আমাদিগের ললাটের ঘুঃ হুজুরকে আমরা হৃদয়
চিরিয়া দেখাইতে পারি। আপনি অভিনিবেশ হইয়া শ্রবণ করুণ,
জমিদার আমাদিগকে যে কি কি অন্যায় করেন, তাহার সাক্ষী দ্বিত
লোকের অভাব হইবে না।' এখানে যাহারা উপনীত আছেন, তাহা-
দিগকে হুজুর জিজ্ঞাসিত হইলে সকলই অনুপূর্ব্বক নিবেদিত হইবেন।

9   Put a suitable adverb before each of the verbs in the following   9
extract :—

তিনি হাঁটিয়া যথাস্থানে পৌঁছিলেন। কিন্তু যাহারা তাঁহাকে
সেদিন দেখিল, তাহারা তাঁহাকে চিনিতে পারিল না। তিনি শুকাইয়া
গিয়াছিলেন যে তাঁহার আকৃতি বদলাইয়া গিয়াছিল, তাঁহাকে দেখিয়া
বুঝিলাম যে তিনি মৃত্যুর পথে অগ্রসর হইতেছেন।

10.   Translate (a), and EITHER (b) OR (c), into English :—

(a) আমি একদিন তাহার সঙ্গে উদ্যানে বেড়াইতে গিয়াছিলাম।   15
তখন প্রভাতকাল, তরুণ সূর্যের রশ্মি কয়েকটী গোলাপফুলের উপর
পড়াতে মনে হইল যেন তাহারা হাসিতেছে। কয়েকটী বালিকা আসিয়া
উদ্যানস্বামীর নিকট ফুল চাহিল; তিনি দয়া করিয়া তাহাদের
প্রত্যেকের হাতে এক একটি গোলাপ দিলেন। বালিকাদের পশ্চাতে
একদল বালক অপেক্ষা করিতেছিল। যখন বালিকারা ফুল পাইয়া
হাসিমুখে চলিয়া গেল, তখন বালকদল উদ্যানে ঢুকিয়া উদ্যানস্বামীর
অনুমতি না লইয়াই ফুল তুলিতে আরম্ভ করিল। তিনি ক্রুদ্ধ হইয়া
তাহাদিগকে তাড়াইয়া দিলেন।

(b) সে কখনও মিথ্যাকথা বলে না। যদি কোন অন্যায় কাজ করে,   10
তবে দণ্ডের ভয়ে সে তাহা গুরুজনের নিকট গোপন করে না। ক্লাসে
সে বড় শান্ত, যখন শিক্ষক মহাশয় কোন উপদেশ দেন, তখন সে
একাগ্র হইয়া তাহা শ্রবণ করে এবং সেই উপদেশানুসারে কার্য্য
করিতে চেষ্টা করে। সে স্কুল হইতে বাড়ী যাইয়া কিছু খাইয়া খেলা
করিতে যায়। এক ঘণ্টা খেলার পর সন্ধ্যার বাতি জ্বলিলে পড়িতে বসে।

(c) আমি তোমার কোন অনিষ্ট করি নাই, তবে তুমি সর্ব্বদা আমার   10
নিন্দা কর কেন? আমার অনেক দোষ আছে তাহা আমি স্বীকার
করি, কিন্তু তোমার কি কোন দোষই নাই? এমন কে আছে, যে দোষ
শূন্য? আর আমার দোষ প্রচার করিয়া তুমি কি লাভ পাও? আমি
তোমার সঙ্গে যতই বন্ধুত্ব স্থাপন করিতে চেষ্টা করি, তুমি ততই তাহা
ভাঙ্গিতে চেষ্টা করিয়া থাক। ‍

BENGALI.

(*For Female Candidates.*)

ADDITIONAL PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *one* of the following two passages into English :—   10

(*a*) একদা কতিপয় তস্কর একত্র হইয়া এক ব্রাহ্মণের কতকগুলি গাভী অপহরণ করিল। ব্রাহ্মণ অর্জ্জুনের নিকট গমনপূর্ব্বক উচ্চৈঃস্বরে ক্রন্দন করিতে করিতে কহিলেন, "দুষ্ট চৌরগণ আমার <u>গোধন</u> হরণ করিয়া লইয়া যাইতেছে।" অর্জ্জুন ব্রাহ্মণের <u>কাতরোক্তি শ্রবণে</u> অশ্রুকম্পাপরতন্ত্র হইয়া মাঝেঃ বলিয়া তাঁহাকে আশ্বাস প্রদান করিলেন।

(*b*) দয়াশীলা কুন্তী সেই করুণরসোদ্দীপক ক্রন্দনশব্দ শ্রবণে অতিশয় দুঃখিত হইয়া ভীমকে কহিলেন, "আমরা পাপাত্মা দুর্য্যোধনের অজ্ঞাত-সারে এই ব্রাহ্মণের আশ্রয়ে পরমসুখে বাস করিতেছি। ব্রাহ্মণ আমাকে যৎপরোনাস্তি সমাদর ও স্নেহ করিয়া থাকেন। এক্ষণে স্পষ্টই বোধ হইতেছে, ব্রাহ্মণ কোন মহাবিপদে পড়িয়াছেন।"

2. Expound the *samasas* in the words underlined in the above extracts.   3

3. Explain মন্বন্তর-পুরাণ, চরণোপাধানভূত and পাবকপ্রসাদলক্ষ।   5

4. Describe the last days of George Washington.   4

5. Correct all errors in the following extract :—   9

যে হৃদয়-আকাশ উর্ব্বর নহে, তাহাতে কখনও শিক্ষার বীজ অঙ্কুরিত হয় না। স্বিয় কার্য্য তুচ্ছ করিয়া যে ব্যক্তি বাজেচর্চ্চায় রত হয় গুণীগণ কদাপিও তাহার প্রসংশা করেন না। প্রত্যহ অপরাহ্নে কতকটা ভ্রমন করিলে তাহাতে বায়ামের ফল দর্শে। আমি তোমার দুর্ণাম করিয়া বেরাই, এ কথা কে কহিল ? তাহার ব্যবহারে আমার আশাভঙ্গ ও মনভঙ্গ উভয়ই হইয়াছে।

6. Write short sentences to illustrate the use of the following words :—   4

অন্যতম, নিম্নতর, লাঞ্ছন and ক্ষেপুষ্প।

7. Turn into indirect form :—   10

রাম বলিল, "শ্যাম! তুমি আজ সকালে কোথায় ছিলে ? আমি তোমাদের বাড়ী যাইয়া তোমাকে পাই নাই।" শ্যাম কহিল, "আজ

সকালে ৭ টার পর ঠিক এক ঘণ্টার জন্য আমি বাহিরে গিয়াছিলাম। তুমি কি সেই সময় গিয়াছিলে ? সেই সময়টুকু ছাড়া আমি সারা দিন বাড়ীতেই ছিলাম। যা'হউক, এখন চল বেড়াইতে যাই।"

8. Explain in simple Bengali any two of the following passages :— 25

(a) যে নীলিমা আকাশের শূন্যতার উপর সিংহাসন পাতিয়া আছে, যাহা পুঞ্জীভূত নবনীরদের অঙ্গের শ্রীস্বরূপ, যে নীলাভ জ্যোতিঃ কালিন্দীর জলের উপর ভাসিয়া বেড়ায় এবং নীলোৎপলদলে যাহার অপূর্ব্ব বিকাশ, সেই শান্ত নীলবর্ণের মাধুর্য্য বৈষ্ণবদিগের চিত্ত বিশেষ- রূপে অধিকার করিয়াছিল। এই বর্ণ জলে স্থলে—নিবিড় বনরাজিতে ও সমুদ্র-তরঙ্গে তাঁহারা সতত প্রত্যক্ষ করিতেন এবং ইহাতেই তাঁহাদের চক্ষু মুগ্ধ হইত। এই জগৎব্যাপী নীলবর্ণ তাঁহারা ভগবৎ চিহ্ন বলিয়া গ্রহণ করিয়াছিলেন। এই জন্য চৈতন্যদেব মেঘ দর্শনে মূর্চ্ছিত হইতেন, যমুনার নীলজলে ঝাঁপাইয়া পড়িতেন এবং একবার নীলসমুদ্রে পড়িয়া ডুবিয়া গিয়াছিলেন।

(b) তাজমহল শুধু ভাস্কর্য্যের চরম নহে—উহা ভাবের চরম। একি কোন প্রেমিকের অশ্রু কঠিন হইয়া শ্বেতমর্ম্মরে পরিণত হইয়াছে ? কিম্বা কোন দেবীকণ্ঠচ্যুত অম্লান যুথিকামাল্য অভিশপ্ত হইয়া কঠোর হইয়া রহিয়াছে ? অথবা পার্থিব শোক দেবতার পদে জানাইবার জন্য কেহ কি স্বর্গের অমল উপাদানে শুভবেদী নির্ম্মাণ করিয়া রাখিয়াছে ? ইহা দেখিয়া মনে হইল যেন স্বর্গের কথা লইয়া কোন দেবতা একখানি আমার কাব্য রচনা করতঃ ভ্রমক্রমে পৃথিবীতে ফেলিয়া গিয়াছেন। হয়ত সেই ভ্রম ধরা পড়িলে স্বর্গের পরীরা উহাকে ঊর্দ্ধে উড়াইয়া লইবার জন্য এখনই আসিবেন। একি স্বপ্ন ? চক্ষু যেন বলিতেছে, "এই স্বপ্ন বিলীন হইবার পূর্ব্বে মুহূর্ত্তকাল ইহা শুদ্ধ বিস্ময়ে দেখিয়া লও।"

(c) তাঁহার সঙ্গে এই অপ্রত্যাশিত মিলনে আমার স্মৃতিসাগর অকস্মাৎ মথিত হইয়া উঠিল। সুখ দুঃখের অনেক অতীত দৃশ্য পর পর যেন কল্পনার পটে অঙ্কিত হইয়া আমাকে কোন ভিন্ন জগতে লইয়া গেল। যে সরল আত্মপরজ্ঞানরহিত, নিঃস্বার্থচিত্ত লইয়া সংসারক্ষেত্রে প্রথম উপস্থিত হইয়াছিলাম, সেই চিত্ত কোন্ যাদুকর মিথ্যা আশা ও সুখের চিত্র দেখাইয়া হরণ করিয়া লইয়া গিয়াছে ! তাঁহার সঙ্গে সাক্ষাৎ লাভ করিয়া যেন মুহূর্ত্তের জন্য সেই অকপট ভেদবুদ্ধিরহিত বিমল হৃদয় ফিরিয়া পাইলাম ! মুহূর্ত্তের জন্য আবার মনে হইল, আমি

ব্রাহ্মণ নহি, সেও শূদ্র নহে, আমরা একজাতি, একবর্ণ। সেই শৈশবে যেমন ছিল, এখনও সেইরূপ—বনের ফুল ও পল্লব ভিন্ন আমাদের অন্য সম্পত্তি নাই ; এবং মাতৃ আজ্ঞানায় বিভোর হইয়া ক্রীড়া করা ব্যতীত আমাদের অন্য কার্য্য নাই।

9. Translate the following passages into English :—   30

(a) তোমার নিকট অনেক দিন পরে চিঠি লিখিতেছি। ভাবিয়া-ছিলাম এবার পূজার ছুটীতে বাড়ী গেলে তোমাদের সঙ্গে দেখা হইবে ; কিন্তু সেই সময় আমার এমন অসুখ হইল যে আমি কিছুতেই বাড়ী যাইতে পারিলাম না। তোমরা সকলে ভাল আছ ত ? সুকুমার এখন কোথায় ? তাহাকে আমার স্নেহ জানাইও। সে একবার কলিকাতায় আসিবে বলিয়া আমাকে লিখিয়াছিল, সে ইচ্ছাটা ছাড়িয়া দিয়াছে কি ?

(b) কলিকাতায় নিত্য নূতন খবর। আমরা সদাসর্ব্বদা একটা উত্তেজনার মধ্যে আছি। বিশেষ শীতকালটা ভরিয়াই ত এখানে বায়োস্কোপ, সার্কাস্ প্রভৃতি কত রকম আমোদ প্রমোদ ! কিন্তু এ সকল সত্বেও আমার মনটা পল্লীগ্রামের মাধুরীতে মুগ্ধ হইয়া আছে ; এখানকার খাঁচার কোকিল আমাদের আম বাগানের কোকিলের মত মধুর-কণ্ঠে ডাকিতে পারে কি ?

(c) এখানে সেখানকার মত তেমন বাস্তবতাও হয় না ! তোমাদের সঙ্গে প্রাণ খুলিয়া যেরূপ আলাপ করিয়া থাকি, এখানকার সঙ্গীদের সঙ্গে তেমনটা হয় না, অনেকটা যেন মৌখিক ভদ্রতা। পল্লীতে গেলে মনে হয় ঠিক নিজের জায়গায় আসিয়াছি, আর এখানে মনে হয় তামাসা দেখিতে আসিয়াছি কয়েক দিন পরেই বাড়ীর জন্যই মন ব্যাকুল হয়।

SECOND LANGUAGE.

HINDI.

(*For Female Candidates.*)

Paper-setters— {
BABU BAIDYANATH NARAYAN SINHA. M.A.,
B.L.
BABU RAMANUGRAHA NARAYAN SINHA. M.A..
B.L.
}

Examiner—BABU PURANCHAND NAHAR. M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *any two* of the following extracts:— 16

(a) कोमलचित कृपालु रघुराई ।
कपि केहि हेतु धरी निठुराई ॥
सहजब्रानि सेवक सुखदायक ।
कबहुँ कि सुहिँ सुमिरत रघुनायक ॥
कबहुँ नयन मम श्रीतल ताता ।
होइहिँ निरखि श्याम मृदु गाता ॥
बचन न आव नयन भरि बारी ।
अहो नाथ मोहिँ निपट बिसारी ॥

(b) मातु मोहिँ दीजे कछु चीन्हा ।
जैसे रघुनायक मोहिँ दीन्हा ॥
चूड़ामणि उतारि तब दयऊ ।
हर्ष समेत पवनसुत लयऊ ॥
कहेउ तात तुम्ह मोर प्रणामा ।
सब प्रकार प्रभु पूरण कामा ॥
दीनदयालु बिरद संभारी ।
हरहु नाथ मम संकट भारी ॥

(c) सुनु कपि तोहिँ समान उपकारी ।
नहिँ कोउ सुरनर मुनि तनुधारी ॥

प्रत्युपकार करौं का तोरा ।

सन्मुख होइ न सकै मन मोरा ॥

सुनु कपि तोहिं समान मैं नाहीं ।

देखेउँ करि विचार मन माहीं ॐ ॥

पुनिपुनि कपिहिं चितव सुरत्राता ।

लोचन नीर पुलकि अति गाता ॥

Either,

2. (*a*) Give any one line from the Rāmcharitmānas (Tuisīkrit   4
Rāmāyaṇa) which is used as a proverb or saying.

Or,

Give the derivation of प्रत्युपकार and give two other words in which
the same prefix has been used as in this word.

Either,

(*b*) Give briefly, in simple Hindi, an account of the experiences
of Hanumān in Lankā ;   *Or,*

The heroic deeds of Lakshmaṇ during the period he was in the
forest.

3. Explain *any two* of the following in Hindi, with reference to the   14
context :—

(*a*) रामनाम अंकित गृह, शोभा वरणि न जाइ ।

नव तुलसी के वृंद वहु, देखि हर्ष कपिराइ ॥

(*b*) कपि करि हृदय विचार, दीन्ह मुद्रिका डारि तब ।

जनु अशोक अंगार, दीन्ह हर्षि उठि-कर गहेउ ॥

(*c*) रामकाज सब करिहहु, तुम बलबुद्धि निधान ।

आशिष दै सुरसा चली, हर्षि चले हनुमान ॥

4. Give translations into English of *any two* of the following ex-   24
tracts :—

(*a*) उस मारीच ने, मरते समय, श्रीरामचन्द्रजी की आवाज़
में, जो "हा सीता ! हा लच्मण ।" कहा था, उस को सुनकर
सीताजी के मन में बड़ी चिन्ता हुई । उन्होंने समझा कि श्री राम-
चन्द्रजी राच्चसों के फन्दे में फँस गये हैं । इस लिये संकट पड़ने पर
हमको याद किया है । इस तरह सीताजी के मन में तरह तरह के
विचार उठने लगे । वे लच्मण से बोलीं—हे लच्मण, जाकर देखो

तो तुम्हारे भाई कैसे हैं ! इस समय हमारा कलेजा धड़क रहा
है । हम बहुत बेचैन हैं । क्याेंकि ये दुःख के वचन तुम्हारे भाई
के मुँह से निकले हैं ।

(b) माता कौशल्या तो चुप रहीं, पर लक्ष्मण को फिर क्रोध
आ गया और बाेले—भाई ! आप ने जो पिता की इस आज्ञा का
भंग करना अधर्म समझा सो ठीक नहीं है । क्या आप ने अभी
तक नहीं जाना कि अपने मतलब के लिये आप को बिना अपराध
वनवास दिया जाता है । क्या यह काेई धर्म की बात है ? हम
ऐसी अन्याय की बात नहीं मानते । समा कीजिये, आप पिता के
वचनाें से राज्य करने को उद्यत थे और अब वन जाने को तैयार हैं
और इसी को धर्म मानते हैं, ऐसे धर्म की हम तो दूर से ही
प्रणाम करते हैं । यह तो धोखा है धर्म नहीं । आप इसे भी
धर्म ही कहते हैं ? आप के सिवा और काेई इस बात को धर्म
नहीं कह सकता ।

(c) जब श्रीरामचन्द्रजी का पूरा पूरा हाल हनुमानजी को
मालूम हो गया तब इन्हाें ने भी उन से अपना सब हाल कह
सुनाया । हनुमानजी ने श्रीरामचन्द्रजी से कहा कि—"महाराज !
आप सुग्रीव से मित्रता कर लीजिये तो वह सीताजी के ढूँढ़ने के
लिये बहुत से बन्दर इधर उधर भेज देंगे, इसी तरह बहुत जल्द
सीताजी का पता लग जायगा । और आप बाली को मारकर
सुग्रीव की स्त्री को दिला दीजिये । इस तरह दोनाें का काम हो
जायगा" । हनुमानजी के ऐसे बुद्धिमानाें के वचन सुनकर श्री
रामचन्द्रजी के भी जी में आ गया कि इस समय सुग्रीव से जल्दर
मित्रता कर लेनी चाहिए । •

Either.

5. (a) Parse *any four* of the underlined words in questions 1, 3,
and 4.

Or,

Construct sentences illustrating the uses of all the *samāsas*, and
naming the *samāsas* used.

Or,

Give rules governing the correct usage of ने and को in Hindi, and
construct four sentences in illustration of the rules.

8

(b) Illustrate the use of *any four* of the following phrases, by   8
means of sentences :—

नौ दो ग्यारह हुग्रा, टाट पर बखिग्रा, बात की बात में,
काटो तो लोहू नहीं, श्राषमान पर चढ़ाना, तूती बोलना, बात
रखना, हार मानना, बाल २ बचना, दिन चढ़े, गुण मानना ।

6.   Re-write the following, after making corrections, where neces-   11
sary :—

तुम मेरा कौताव मति कुवो । ग्रेसे हालत मे केग्रा कहना
चाहिए । मैं ने एक श्रांब खाया परंतु श्रांब खटी निकली । मैं ने
वीपीन को मारी ऊष का रोना सून कर मेरे चौत पर वरी ग्रसर
परी । ग्राप कय दीन यहा रहोगे । वीकमेंपूर मे एक बहुत ग्रछा
कारिग्र रहत है । तुम को मेरे से केग्रा पूछ्नो है । वोह ह्वा से
कहि चला गग्रा ।

<center>

SECOND LANGUAGE.

URDU.

(*For Female Candidates.*)

Paper-setter—MAULAVI MD. HIDAYAT HOSSAIN.

Examiner—MRS. Z. R. Z. SUHRAWARDY.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

</center>

1. Translate *any two* of the following extracts into English :—

<div dir="rtl">

(a) کائیں بھینسیں عجـــــب بنائیں   10

کیــــا دوہہ کی ندیاں بھائیں

پیدا کئے اونٹ - بیل - گھوڑے

ہر شی کے بنا دئے ہیں جوڑے

روشن آنکھیں بنــــائیـــں دو در ۔

قدرت کی بہـــــار دیکھـــنے کو

</div>

دو ھوذت دئے کہ منھہ سے بولیں

شکر اُس کا کریں زباں کھـــولیں

بے شک ھے خدا قوی و قادر

ھرشی اس نے بنبـائی نادر

(b) ھے ھمیشہ مِـــری خـــدا پہ نظـــر

رات ھو دن ھو شـــام ھو کہ سحـــر

نہ اُجـــالے میـــں ھے کســـی کا ڈر

نہ اندھیرے میں کوئی خوف و خطر

کیونکہ میرا خدا ھے میرے ساتھہ

ھـــو بیـــابان میں ٰگـــزر میـــرا

یا سمنـــدر پہ ھوٰسفـــر میـــرا

گور رہ جائے محجمـــہ سے گھر میـــرا

رھے یھـــں بھـــی قوی جگر میرا

کیونکہ میرا خدا ھے میرے ساتھہ

(c) اتفـــاقـاً ایک پودا اور گھـــاس

باغ میں دونو کھڑے ھیں پاس پاس

گھاس کھتی ھے کہ اے میرے رفیق

کیا آنوکھا اِس جھـــاں کا ھے طریق

ھے ھماری اور تمھـــاری ایک ذات

ایک قدرت سے ھے دونوں کی حیات

متّبـــی اور پانی ھوا اور روشـــنی

واسطے دونو کے یکسـان ھے بنـی

تجھہ پہ لیکن ھے عنایت کی نظـــر

پھینک دیتے ھیں مجھے جز کھود کر

6   2. (*a*) Re-write with vowel-points :— اشیا ۔ قادر ۔ تحمل ۔ مفارقت

کتابت and منصف.

5   (*b*) Write down the meanings of the following :— نیک نھاد ۔

متواتر and مرفہ حال ۔ کذب ۔ حرم سرا.

(*c*) Write short sentences to illustrate the use of the following   10
words:— رشوت ستقانی ۔ یتیم ۔ باطل ۔ مالامال ۔ شوکت ۔ ماننڈ ۔ ناکام

قسام ازل and بیدادگر۔ دور اندیش.

6   (*d*) Fill up the ellipses in the following :—

محمود اور اسمعیل دو بیٹے سبکتگین کے . . . مگر محمود

. . . لڑکپن سے یہ حال . . . کہ فوج کشی اور لڑائیوں . . . باپ

کے ساتھہ ھی رھتا . . . جب باپ مرا تو یہ نیشاپور . . .

حاکم تھا ٭

12   3. Translate *one* of the following into English :—

(*a*) تمام عمر اس بادشاہ کی فقیرانہ بسر ھوئی ۔ ھمیشہ

عبادت الھی اور پرھیزگاری میں مشغول رھا ۔ اپنے مصارف

کے واسطے سلطنت کے خزانے سے اس نے کبھی ایک حبّہ

نھیں لیا ۔ صرف قران مجید کی کتابت پر اوقات سرکی ۔

ایک بار کسی امیر نے اس خیال سے کہ بادشاہ کے ھاتھہ

کا لکھا ھوا قران ھے معمول سے زیادہ دام دئے ۔ یہ امر سلطان

ناصر الدین کو ناگوار خاطر ھوا ۔ اس لئے آیندہ سے خفیہ طور

پر ھدیہ کرنے کا اھتمام کیا ٭

٠   (*b*) وھاں کے باشندوں کی عقل و تمیز کا اندازہ تم اس بات

سے بخوبی کر سکتے ھو کہ وہ سو سے زیادہ گنتی نھیں جانتے ۔

جن لوگوں کے پاس پانسو ہرنوں کا گلّہ ہوتا ہے وہ بڑے
دولتمند اور مرفہ حال سمجھے جاتے ہیں ۔ وہ اپنے گلّے کے کئی
غول بناتے ہیں ۔ تاکہ شمار میں دقت نہ ہو ۔ جن کے پاس
سو سے کم ہرن ہوتے ہیں ۔ وہ اپنے ہر ایک ہرن کا جدا نام
رکھ لیتے ہیں ۔ جس طرح آدمیوں کے نام رکھتے ہیں *

(c) پیر مرد نے دعائی خیر دیکر کہا ۔ صلاح وقت یہ ہے کہ
امرا کی تقصیر معاف فرمائے ۔ اُن کا رتبہ بڑھائے ۔ تاکہ آیندہ
سرخرو بنیں اور گذشتہ تقصیرات کی تلافی کریں ۔ سلطان نے
اس کی صلاح مان لی ۔ ملتان پہنچ کر ایک دربار کیا ۔ سرداران
لشکر کو مجتمع کرکے ان کے حال پر مہربانی فرمائی اور اپنا
منشا سمجھایا ۔ سب نے تلوار کے قبضے پر ہاتھ رکھکر عہد
و پیمان تازہ کیا *

4. (a) Write down the genders of :— دھوبی ۔ دل ۔ چڑیا ۔ بھوک and   5

(b) Give the difference in the significations of :—   6

   (i)   اسکا ہاتھ کٹنگیا and اسکا ہاتھ کاٹا گیا.

(ii)   اگر وہ جائے تو جانے دو and اگر وہ جاتا ہے تو جانے دو

  (c) Write down the plural forms of :—

     مسجد ۔ سلطان ۔ علم ۔ قانون and تکلیف.   5

and the singular forms of :—

     عقول ۔ اصحاب ۔ رعایا ۔ مصائب and احوال.   5

5. Write in simple prose :—   8

ایام مصیبــــت کے تو کاٹے نہیـــں کٹتے
دن عیش کے گھڑیوں میں گزر جاتے ہیں کیسے

6. Translate into Urdu : —   12

Some years ago, a little boy, not more than eight years old, was sent on an errand. As he was going home, a lame dog, rough and dirty, came limping after him. A bad boy would have thrown stones at the poor dog ; but the little boy of whom I am telling you, had been taught to be gentle and kind. He saw that the dog had been ill used, and that it wanted a friend. So he let it follow him home.

SECOND LANGUAGE.

ORIYA.

(*For Female Candidates*).

Paper-setters— { BABU GODABARISA MISRA, M.A.
           ,,   NILKANTA DAS, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *any two* of the following into English :—

(*a*) ଯୁଧୁଷ୍ଟିର ଅତ୍ୟନ୍ତ ଧାର୍ମିକ ଥିବାରୁ ସେ ସର୍ବଦା ମିଥ୍ୟା କହିବାକୁ   12
ଡରୁ ଥିଲେ । ଲୋକମାନେ ତାଙ୍କୁ ଓ ତାଙ୍କର ଭାଇମାନଙ୍କୁ ଭକ୍ତି ଓ
ସ୍ନେହ କରୁ ଥିଲେ । ତାଙ୍କ ସାଧୁତା ଦେଖି ଶ୍ରୀକୃଷ୍ଣ ତାଙ୍କର ପରମ
ବନ୍ଧୁ ହେଲେ । ମହାଭାରତ ଯୁଦ୍ଧରେ ଶ୍ରୀକୃଷ୍ଣ ଅର୍ଜୁନଙ୍କର ରଥଶ୍ରୁଲକ
ହୋଇ ଥିବାର ମହାଭାରତରେ ଲେଖା ଅଛି । ଯୁଧୁଷ୍ଟିର ସତ୍ୟବାଦୀ
ଓ ଧାର୍ମିକ ଥିବାରୁ ସେ ଏକଶତ କୌରବଙ୍କୁ ଗ୍ରଜୟୁଧଙ୍କୁ ପର୍ଯ୍ୟ କର
ଯୁଦ୍ଧରେ ଜୟୀ ହେଲେ । କେବଳ ଏତକ କୁହେ । ଲୋକେ କହନ୍ତି
ସେ ଜୀବଦ୍ଧାବସ୍ତାରେ ସ୍ୱର୍ଗକୁ ଯାଇ ଥିଲେ ।

(*b*) କଛୁକାଳ ଆଗେ ଆମଦେଶରେ ବାଳକାମାନେ ପାଠଶାଳାକୁ   12
ଆସୁ ନ ଥିଲେ । ଏବେ କନ୍ତୁ ଆଉ ସେ କଥା ନାହିଁ । ବାଳକମାନେ
ଯେପର ଶହ ଶହ ହୋଇ ପଢ଼ିବାକୁ ଆସୁ ଅଛନ୍ତି, ବାଳକାମାନେ
ସେହିପର ଆସିବାକୁ ଆରମ୍ଭ କଲେଣି । ତଥାପି ଉଚ୍ଚଶିକ୍ଷା ପାଇବାକୁ

ବାଳକାମାନେ ଭଲ୍ତା କରୁ ନାହାନ୍ତ୍ର । ସମୁଦାୟ ଓଡ଼ିଶାରେ ଗୋଟିଏ
ମାତ୍ର ଭଲ ବାଳକା ବଦ୍ୟାଳୟ ଅଛ । ଏହାହ ତାହାର ପ୍ରମାଣ ।
ବାଳକ୍ରମାନେ ପଢ଼ିବା ନମସ୍ନେ, ଓଡ଼ିଶାରେ ଅଠର ଗୋଷ୍ଠ ଭଲ ଇଂଗ୍ରଜ
ବଦ୍ୟାଳୟ ଅଛ । ବାଳକାବଦ୍ୟାଳୟୁର ସଂଖ୍ୟା ଏତେ ଅଳ୍ପ କାହିଁ କ ?

   (c) ଦନକର ସୀତା। କୁଠୀର ଦୁଆରେ ବସିଶ ଏକାନ୍ତ ହୋଇ,   12

    ହରସଭ୍ଭକର ସଜ୍ଜପୁର କଥା। ମନେ ହେଉ ଥିଲେ ଆଇ ।

    ତରଉତରେ ଯାଇଁ କନକ କୁରଗ ଅଦୃଶ୍ୟ ହୋଇ ଲ୍ଵବନେ ।

    ଶ୍ଲଢାର ଶ୍ଭରୁ ହେମ ଅପଧନ ଭଲ ହେଲେ ଏବେ ମନେ ।

    ମୃଗ ଧର ତାଙ୍କୁ ଅଣି ଦେବା ପାଇଁ ପେଶିଲେ ରାମଙ୍କ ଖରେ ।

    ରାମ ଆସିବାର ବାଟ ଶ୍ଭହିଁ ସୀତା। ବସି ଅଛନ୍ତ କୁଠୀରେ ।

2. Sketch briefly the life of Saṁkarácháryya or of Ráni Durgá- 10
bati in simple Oriya Prose.

3. Explain clearly how plant life depends on light.   10

4. Expound the *samāsas* of *five* of the following :—   10

   ଭ୍ଷ୍ ବେଶଧାସ୍ର, ସାର୍ବଜନାନ ମେଶୀ ବୃତ, ବହୁଳ ବୃଷ୍ଟ ନକଠସ୍ଥ
ନରଶ ପ୍ରଦେଶ, ଗଳତ ଭୂଷାରାକୁଳତ ମେରୁସନ୍ଧିହ୍ରତ ଅଞ୍ଚଳ, ବର୍ଷିଗଣ୍ଡ
ସ୍ଵାଦ ବଷ୍ଟାନ, ଅବନଧରଣ୍ଡୀମାଲ୍ୟ ବଭୂଷିତ, ବୟୁ୍ୱବାୟଦୁ୍ତ ଦେଶ,
ମଣିରଣ୍ ବଭୂଷିତ ସଜ୍ଜପ୍ରାୟୟଦ । •

5. Change the voice in *three* of the following :—   6

• ମଟେ ଦେଉଲ ଦଣ୍ଡ ନାହିଁ । ତମେ କଅଣ ଖାଉଛ କି ?
ମୋହାର୍ ଉତେ କଛ ଦଅ ହେବ ନାହିଁ । ତୋପାଇଁ ପଖ ପକାଇଛ ।
କେତେ କାଠ ମାପିଲ ?

6. Split up into or explain in simple sentences the following :— 5

   ଯେଉଁ ସାହ୍ତ୍ୟ ମାନବର ସାରଭୂତ ଏହ୍ର ମନର ଭଚତନ୍ୟାମାନଙ୍କର
ବମଲ ଲ୍ଲେଖାଡ଼କୁ ଅମ୍ଲାନ ଭାବରେ ସଂରକ୍ଷଣ କରଇ ଅଛ, ତାହା। କାୟର
ଉପାଦେୟ୍, ଏହା। ଋଷିମାନ୍ ବ୍ୟକ୍ତିମାଏକେ ଅନୁଭବ କର ପାଇବେ ।

   8

7. Explain the meaning of *seven* of the following :—   7

ଅଭ୍ୟୁକ୍ଷ, ତେଜୋଦ୍ୟାସ, ଦୁର୍ବାର ଲ୍ଲସା, ରକ୍ତାକ୍ତ ଦେହ,
ସାଧାରଣତନ୍ତ ଶାସନ, ରଷ୍କ୍ଷବ୍ଲବ, ମାନସପ୍ରଦ୍ୟକ୍ଷ, ଐକମତ୍ୟ, ଅପ୍ରତିହତ
ଅଡ୍ୟାକ୍ତର, ପର୍ଯ୍ୟଥପର୍ଯ୍ୟଶତା, ଉପସଂହାର ।

8. Write out the sense of the following in simple Oriya, clearing   8
metaphors :—

ଯେଉଁ ଦେଶରେ ପୁରୁଷମାନେ ରମଣୀମାନଙ୍କୁ ବଳାସତରଙ୍ଗରେ
ଭ୍ରମମାନ ଦେଖିବାକୁ ଉଦ୍ୟୁକ ଥାଆନ୍ତି, ସେ ଦେଶର ଆଶାଭରସା ଲୁପ୍ତ
ହୁଏ । କିନ୍ତୁ ଯେଉଁ ଦେଶର ରମଣୀମାନେ ନିଜେ କୋମଲପ୍ରକୃତି
ଥାଇ ପୁରୁଷଠାରେ ପୌରୁଷର ପୂଜା କରନ୍ତି, ଏବଂ ପୁରୁଷମାନେ ନିଜେ
ବୀରଭବ ପ୍ରଧାନ ଥାଇ ନାସ୍ତ୍ରୀମାନଙ୍କର ସ୍ନିଗ୍ଧଭବକୁ ସମାଦର କରନ୍ତି,
ସେହି ଦେଶ ଅବଶ୍ୟଲକ୍ଷ୍ମେ ଉନ୍ନତିମଙ୍ଗ ଆଡୋହଣ କରି ମାନବଜାତିର
ଆଦର୍ଶ ସ୍ଥାନୀୟ ହୁଏ ।

9. Translate *any two* of the following into English :—   20

(*a*) ନଉଠନଙ୍କ ପିତା ତାଙ୍କ ପୈତୃକ ଭୂମି କର୍ଷଣ କରି ଜୀବିକା
ନିବାହ କରୁ ଥିଲେ । ଅଳ୍ପ ବୟସରେ ପିତୃହୀନ ହେବାରୁ ନଉଠନ
ଜନନୀଙ୍କ ସମୀପରେ ପ୍ରାଥମିକ ଶିକ୍ଷା ଲଭ କରି ଥିଲେ । ବାର ବର୍ଷ-
ବେଳେ ନଉଠନ ଏକ ନିକଟବର୍ତ୍ତୀ ନଗରସ୍ଥ ପାଠଶାଲାକୁ ପ୍ରେରିତ
ହେଲେ । ସେଠାରେ ନିଜର ପ୍ରତିଭା ହେତୁରୁ ସମସ୍ତଙ୍କର ପ୍ରିୟ ହୋଇ
ଥିଲେ । ଯେତେବେଳେ ପାଠଶାଲାର ଛାତ୍ରମାନେ ଅବସର ପାଇ
ଖେଳୁ ଥାନ୍ତି, ନଉଠନ ଅଧ୍ୟୟନରେ ରତ ଥା ଆନ୍ତି । ସେ ଏହି
ସମୟରେ ଗୋଟିଏ ଜଳ ସକ୍ଟିକା ନିର୍ମାଣ କରି ଥିଲେ ।

(*b*) କାଶୀରେ ଭୁବନେଶ୍ୱର ପର ସୁବୃହତ୍ ଦେବମନ୍ଦିର ଏବେ ଆଉ
ଦେଖା ଯାଏ ନାହିଁ । ସେ ସମସ୍ତ ବିନଷ୍ଟ ହୋଇ ଅଛି । ତଥାପି
ପ୍ରଭାତ କାଲରେ ଗଙ୍ଗାବକ୍ଷରୁ କାଶୀର ଦୃଶ୍ୟ ଅତି ମନୋହର ।

ଗୋଟିଏ ମାତ୍ର ପ୍ରଶସ୍ତ ରାଜପଥ ଅଛ୍ଛ । ତାହାୁ ବକ୍ରଭାବରେ ନଗରର
ଅଭ୍ୟନ୍ତରରେ ପ୍ରସାରିତ ରହ୍ ଅଛ୍ଛ । ନଗରର ଏକ ପାର୍ଶ୍ୱରେ
ଗୋଟିଏ ବଦ୍ୟାମନ୍ଦିର ଅଛ୍ଛ । ତାହା ଦେଖିବାକୁ ଅତି ସୁନ୍ଦର ।
ଏହାର ଚୂଡ଼ା, ସ୍ତମ୍ଭ, ତୋରଣ, ଖିଲ୍ଲନ ପ୍ରଭୃତି ଭଲ୍କୃଷ୍ଟ ଉଭୟରେଣୀୟୁ
ପ୍ରଣାଳୀରେ ନର୍ମ୍ମିତ ।

(୨) ଜଲ ଘଟରେ ଦର୍ଓଟି ପାଣ୍ଥ ଥାଏ । ତନ୍ମଧ୍ୟରୁ ଗୋଟିଏ ଜଲ
ପୂର୍ଣ୍ଣ, ଅନ୍ୟଟି ଶୁନ୍ୟ । ଏକ ପାଶ୍ୱରୁ ଅନ୍ୟ ପାଶ୍ୱକୁ ଗୋଟିଏ ସୁକ୍ଷ୍ମ
ଛିଦ୍ର ଥାଏ । ତଦ୍ୱାରା ଏକ ପାଶ୍ୱର ଜଲ କ୍ରମଶଃ ଅନ୍ୟ ପାଶ୍ୱରେ
ଟୋପା ଟୋପା ହୋୱ ପଡ଼େ । ଛିଦ୍ରର ଆକାର ଅନୁସାରେ ଟୋପା
ଶୀଘ୍ର ବା ବଲମ୍ବରେ ପଡ଼େ । କୌଣସି କୌଣସି ଘଟରେ
ସେକେଣ୍ଡକେ ପାଞ୍ଚ ଟୋପା ପର୍ଯ୍ୟନ୍ତ ପଡ଼ି ଥାଏ । କୌଣସି କୌଣସି
ଘଟରେ ସମ୍ବ ଦଶ ଟୋପା ପଡ଼ିବାକୁ ମିନିଟିଏ ଲାଗି ଯାଏ ।

SECOND LANGUAGE.

ASSAMESE.

(For Female Candidates).

Paper-setter—BABU LAKSHMINARAYAN BEZBARUA.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into English:—

(ক) বচকৰ বিদ্যা বুদ্ধি অনুসাৰে পুথি সাকৰাবা জাবক ৰা হয় । 10
ঈশ্বৰ বিদ্যা বুদ্ধিৰ আদি আৰু অন্ত, তেওঁ বিদ্যাময়, বুদ্ধিময় আৰু
জ্ঞানময় ; এতেকে তেওঁ বচা বিষ যে সাবময় পুথি তাক এনেই বুজিব
পাৰি । নীতি শিক্ষাৰ নিমিত্তে চাণক্য, বিধি শিক্ষাৰ নিমিত্তে মনু,
বা ধৰ্ম শিক্ষাৰ নিমিত্তে পতঞ্জলি চৰ্চা কৰিবৰ কোনো সকাম নাহি ।

(b) পতি-ভক্তিতো মহাৰানী ভিকটোৰীয়া সতীৰ আদৰ্শ ৰমণী   10
আছিল। ইংলণ্ডৰ ৰাজপাটত উঠাৰ তিনি বছৰৰ পাছত, খৃঃ ১৮৪০
চনৰ ১০ ফেব্ৰুৱাৰীত জৰ্ম্মানিৰ অন্তৰ্গত চেক্সকোবৰ্গ প্ৰদেশৰ ৰাজ-
কুমাৰ, কোৰৰ এলবাটৰ লগত মহাৰানীৰ শুভ বিবাহ সম্পাদন হয়।
তেওঁলোকৰ দাম্পত্যপ্ৰেম জগতৰ অনুপম আৰ্হিৰ বস্ত।

(c)   বহল পথাৰখনি ঘাঁহেৰে শুৱনি,   10
বলিছে ওপৰে ভাৰ মৃদু সমীৰণ ;
ৰাঙলী শ্যামলী দুয়ো ওপৰ তলত
বিস্তাৰিছে আপোনাৰ বিদায় কিৰণ।
হেঁপাহেৰে আছোঁ চাই পচিমৰ পিনে—
কতনো দুৰাশা মোৰ উদিছে মনত,
দেখিছোঁ তাতেই যেন স্বৰ্গীয় মূৰতি,
উদিছে ভক্তিৰ ভাৱ মোৰ হৃদয়ত।

2.   Tell briefly what you know of চাণক্য and পতঞ্জলি.   2

3.   Expound the *samāsas* in the following :—   5

মধু-মিলন, প্ৰাণদণ্ড, অপায়-অমঙ্গল, অন্নচিন্তা, জীৱন-যুদ্ধ ।

4.   Give briefly the purport of ধনৰ ব্যৱহাৰ as detailed in your text.   10

5.   Join the following sentences to form one connected sentence :—   5

(a) ব্ৰহ্মপুত্ৰৰ পাৰত সেই গছজোপা আছিল।

(b) গছজোপাত ফুলে ফুলে আছিল।

(c) গছজোপাত কপৌ চৰাই এজোৰে বাহ লৈছিল।

(d) বাহটোত দুটি পোৱালি আছিল।

(e) নিষ্ঠুৰ লৰাটোৱে সেই পোৱালি দুটি পাৰি আনিলে।

6. Re-write the following, correcting all errors :—

(a) ৰিষ্টম নম্বৰে লৰ্জ্জ সকলো মন্ত্ৰীৰ উপৰত।   তেওঁৰ মোমায়েক
আছিল একজন জুতা চিলাই কৰা মুচি।

(b) খোৰা আৰু বান্ধা-বাঢ়াৰ পানি উতলাই লবা হাগে।

(c) নিজৰ ঘৰৰ ভিতৰত যোৱাৰ আগে গাটো ধুই ফেলাবা লাগে।

(d) ঘৰৰ চাৰিও কাখৰ জঙ্গল কাটি ফেলাই দিলে ভাল হই।

(e) ঘৰীত এটা বাজিলে তথাপি আমালোকৰ ভাত খুৱা নহলে
যেতিয়া ভাত নাখাওঁ, ভাত নৈত উটুউৰাই দে।

7.   Give derivations of the following words :—   10

হামৰাও কাটি, অৱৰাচ্য, ৰাগীৰালা, কলগছ, পদুলি, সন্তাপ, হল,
কুৰ্চুতীয়া, শলাগ, নাৱৰীগ।

8. Turn (*a*) into direct, and (*b*) into indirect, form of speech :— 6

(*a*) পাছত হোচেনে কাফ্ৰীজনৰ ভৰিত পৰি ক্ষমা প্ৰাৰ্থনা কৰি কৰিলে ধৰিলে যে কাফ্ৰীজনে ইমানখিনি মানুহক নৈত বুৰি মৰাৰপৰা উদ্ধাৰ কৰিলে, তেওঁকো যেন অহঙ্কাৰ-নৈৰপৰা উদ্ধাৰ কৰে ।

(*b*) মই ছজনক বচালেঁা, যা এতিয়া তই বাকীজনক বচাগৈ হোচেন ! তই যিজনী ভিৰুতা মানুহক মোৰ ওচৰত বহি থকা দেখিছ, তেওঁ মোৰ আই হয় ।   তোৰ চক্ষু আছেনে নাই তাকেহে পৰীক্ষা কৰি চলেঁা, দেখিলেঁা তই এতিয়াও কণা ।

9. Translate (*a*), and *either* (*b*) or (*c*), into English :—

(*a*) স্বায়ৰন্ত মানুহ তৰ্জুৰ নিচিনা ।   তাৰ মনত খুদ পৰিমাণ · 15 প্ৰভেদো ডাঙৰ প্ৰভেদ ।   সি কোনো কথাকে সক বুলি উলাই নকৰে, বৰং সক কথাৰো ডাঙৰ অৰ্থ আছে বুলিহে ভাবে । সেই দেখি স্বায়ৰন্ত মানুহে সক বৰ সকলো ৰকম কথাকে বিবেচনা কৰি চায় । বহুত মানুহৰ মনৰ ওপৰত ডাঙৰ নামৰ অতুল প্ৰতাপ । সিহঁতৰ বিবেচনাত ডাঙৰ মানুহৰ কথা শিৰোধাৰ্য্য । কিন্তু স্বায়ৰন্ত মানুহৰ বিবেচনা তেনেকুৱা নহয় ।

(*b*) ইয়াৰ পিছত মোৰ বেঙুত বহাজনৰ ফালে উভতি চাই দেখিলেঁা, 12 তেওঁৰ হাতত এটা টোপোলা, আৰু সেই টোপোলাৰ পৰা কিবা জুলীয়া গুড়ৰ নিচিনা ওলাই পৰিছে । মই তেওঁক কলেঁা, " চাৰ, মোৰ কপোৰত যেন সেই জুলীয়া বোৰ নেলাগে ।" তেওঁ টোপোলাটো ভালকৈ সামৰি আমাৰে নৈতে কথাবাৰ্তা পাতিবলৈ লাগিল ।

(*c*) মই সুন্দৰমতে তৃতীয় শ্ৰেণীৰ গাড়ী এখনত অকলে উঠি, নানা 12 আমাৰ দেশী গীত গাই, চাৰিও পিনে প্ৰকৃতিৰ শোভা চাই, কেম্ব্রিজ পালেঁাগৈ ।   কেম্ব্রিজ ষ্টেশ্যান পোৱাৰ আগেয়ে তাৰ ঘৰবাৰী গিৰ্জাৰ্দ্দ-সুন্দৰ চুড়াবোৰে যেন মানুহক কৈ দিয়ে " চোৰাঁহি চোৰাঁহি, মই কেনে সুন্দৰ চহৰ ।" অথচ কেম্ব্রিজ তেনে সুন্দৰ চহৰ নহয় । কেম্ব্রিজতকৈ অক্সফোর্ড শুৱনি ।

ASSAMESE.

(*For Female Candidates*).

ADDITIONAL PAPER.

Candidates are required to give their answers in their own words
as far as practicable.

The figures in the margin indicate full marks.

1. Translate *one* of the two following passages into English :—   10

(a) বাৰ বছৰ কাল নানা দেশ পৰ্য্যাটন কৰি, নানা ক্লেশ ভূঞ্জি, পূৰ্ব্বৰ প্ৰতিজ্ঞা অনুসৰি পাণ্ডৱসকলে আৰু এবছৰ অজ্ঞাতবাসত কটাব লগা হল । সেই প্ৰতিজ্ঞাৰ পণ এনেদৰে বন্ধা হৈছিল যে অজ্ঞাতবাসৰ কাল পূৰ্ণ নোহওঁতে, কিবা স্বৰূপে জনাজাত হলেও, সিবিলাকে ঘূৰিবাৰ বছৰ কাল দেশে দেশে ভমিব লগা আছিল ; সেই কাৰণে পাণ্ডৱসকলে পত্নী দ্ৰৌপদীৰে সৈতে ছদ্মবেশেৰে বিৰাট ৰজাৰ ঘৰত বিশেষ সাৱধানেৰে বেলেগ বেলেগ অন্নচৰৰ বৃত্তি লৈ জীৱন যাপন কৰিব লগতে পৰিছিল ।

(b) ভাৰতবৰ্ষৰ পাঁচ ভাগৰ এভাগ মানুহৰ গাত, সিহঁত ওপজা দিনৰেপৰা, অশুচি অস্পশ্য বুলি ছাপ পৰে । সেই মানুহবোৰৰ জীৱন মলিনতা মাদকতা আদি পাপত অতিবাহিত হব লাগিছে, আৰু সজ জীৱন আৰু ভাল মানুহৰ সমাজৰপৰা সেই মানুহবোৰ সম্পূৰ্ণ বাহিৰত, ভাল মানুহৰ ভাল সমাজৰ সম্পৰ্কলৈ সেইবোৰ একেবাৰেই আহিব নোৱাৰে, সেই দেখি সভ্যতাৰ প্ৰভাৱৰ পৰা সিহঁত বঞ্চিত ।

2. (a) Who were the Pandavas, and why were they so styled ?   2
    (b) State briefly the circumstances under which the Pandavas   4
had to go to exile.
    (e) What were the names assumed, and offices held, by each of   6
the Pandavas in the court of Virata ?

3. Explain the following passages :—

      (a)   এক অংশ মানুহৰ অনন্ত জ্ঞানৰ   6
                একে লুটি, একে পাত মাথোঁ জ্যোতিষৰ,
                কত সূৰ্য্য অগণন লইছা কোলেতে,
                লগে লগে কত গ্ৰহ ভমিছে তোমাত,
                দুটি এটি উপগ্ৰহ আছে গাইপতি,
                তুলনাত ধৰাখনি মাথোঁ কণা এটি ।

      (b)   চঞ্চল মেঘৰ ছায়া   সম পুত্ৰ পত্নী জায়া,   6
             জীৱন যৌবন ধন জন ।

হইবা সবে এৰাএৰি,   জানিবা টাটক খেৰি,
হৰাই যেন জাগিলে সপন ॥

আৰ অৰ্থে ব্যৰ্থ যায়   দুৰ্ল্লভ মনুষ্য কায়,
ইসে তৈল পৰম অসুথ ।

কৰা আন আশা ভঙ্গ,   লই ভকতৰ সঙ্গ,
হয়ো ঝাটে ঈশ্বৰ সমুখ ॥

4. Give equivalents of the following words, in English :—   6

গ্ৰহ, উপগ্ৰহ, ৰামধনু, জোতিষ, জায়া, ঝাটে ।

5. Form short sentences illustrating the use of the following   10
words :—

চাটুকাৰ, হুতাশন, জোঁট, দোৰাউঁৰ, অমূৰ্ত্তক, ফুলৱী, শিপিনী,
আওভাও, টাংগুটি, বাউল ।

● 6. Rewrite the following, avoiding all inelegant words, and correct-   6
ing all errors :—

তেৰাই শনৈঃ শনৈঃ ভয়ঙ্কৰ খংদীপ্ত চক্ষুহালেৰে মোক প্ৰতি
দৃষ্টিপাত কৰি গভীৰ শব্দে গোটেই মন্দিৰটো নিনাদিত কৰি বাক্য
লগালে—‘‘এটা ডাঁহৰ পাছভৰি যুগল কিমান শক্ত হলে সি তাৰ
শক্ৰহস্তৰপৰা পলাই দাৰিবলৈ সমৰ্থৱন্ত হব, মই এতেখ্বেলি তাকে
ধ্যানিছিলোঁ ।

7. Fill up the ellipses in the following :—   4

(a) ৰাইজে—জোকাৰিলে তৈ বয় ।

(b) যতে ইচ্ছা—বাট ।

(c) হলা গছক সকলোৰে--মাৰে ।

(d) হৰিণাৰ ·ঠৈবৰী ।

8. Render the following into idiomatic Assamese :—   10
   (a) That beggar does not work, because he is lazy.
   (b) I have come to beg your pardon.
   (c) Come before the sun sets
   (d) He went before eating.
   (e) You are to blame. ●
   (f) Blow the fire.
   (g) The wind blows now.
   (h) Have you boiled the milk ?
   (i) The birds fly in the open air.
   (j) He sat by the well.

9. Translate *any two* of the following extracts into English :—

(a) একে উচালে কোনও জগততও উদ্গতিৰওথ টিঙত উঠিব নোৱাৰে ।   15
কোনো কোনো মানুহে কেতিয়াবা স্বঘটনাৰ গুণত, আনে আৰ্জি থোৱা

বিভূতিৰ গৰাকী তৈ, সেই বিভূতিৰ বলত ডাঙৰ মাহুহ বোলায়,
কিন্তু তেনেকুৱা ঘটনা সংসাৰত অলপতে ঘটে । বিশেষত, পৰে আৰ্জি
থোৱা ধনেৰে ডাঙৰ হলে তাত পুৰুষালি নাই ; নিজৰ ৰাউসিৰ বলেৰে
যি ডাঙৰ হয় সেই পুৰুষতে ধন্ত ।

(b) স্বধাংশুৱে পদূলিত হেমক দেখি স্বধিলে, " তুমি কবপৰা   15
আহিছঁ ? "

হেম নিমাত ।

স্বধাংশুৱে আকৌ কলে " নামাতঁা কিয় ? "

হেমে বিনীতভাৱে কঁপা মাতেৰে উত্তৰ দিলে, " মোৰ ঘৰ ইয়াতে ।"

স্বধাংশু ।—" পিছে, ইয়ান কৰিছা কি ? "

" হেম আকৌ নিমাত হল ; তেওঁৰ গাৰ কঁপনি উঠিল, কলা মুখ
আৰু কলা তৈ উঠিল ।

স্বধাংশু ।—" তুমি এইবাৰ স্মাই—এ পৰীক্ষা দিছা ? "

হেম ।—" হয় । "

(c) পূৰনিকালত ভাৰতবৰ্ষৰ তিৰোতাবিলাক বীৰতৰ আদৰ্শেৰে গঠিত   15
আছিল । কি শাৰীৰিক বলত বেলঁা, কি মানসিক বুদ্ধিবৃত্তিত বোলঁা,
সকলো বিষয়ত তেওঁবিলাকে নিজৰ অসাধাৰণ প্ৰতিভাৰ চিন দেখুৱাই
তগেছে । কোনোৱে মন্ত্রীস্বৰূপে ৰাজকাৰ্য্যত পতিক পৰামৰ্শ দিছিল,
কোনোৱে যুদ্ধৰ সাজ পিন্ধি পতিৰ কাষত থিয় তৈ শত্ৰুৰ লগত ৰণ
কৰিছিল, কোনোৱে পতিৰ হস্তে নিজৰ জীৱনকো বিসৰ্জ্জন দিছিল ।

SECOND LANGUAGE.

KHASI.

(For Female Candidates).

Paper-setter—REV. MR. J. C. EVANS.

Examiner—ROY ROWLAND THOMAS, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1   Narrate in Khasi the Story of Ka Nam.   10

2.   How are adjectives generally formed in Khasi ?   Discuss fully   12
the changes which take place when *ba* is dropped from any of the

conjunctive particles *uba. kaba*, &c., and when adjectives are formed
without the prefix *ba*. Illustrate your answer in each case by exam-
ples.

3. Give six correlatives and write short sentences illustrative of 10
the use of each.

4. Explain *five* of the following with reference to the context :— 13

(a) Ka lynti rim ka lynti thymmai.

(b) Ia um khmat um lem.

(c) Nga ai shi khut

(d) Nga'n shu iapein aiuh-re-aiuh bad ki Dykhar.

(e) Nga kein kata ka bthong kynthei.

(f) Ka Khohsw bunrw bad u tyrso u la mih ha Kper.

5. Translate into English :— 25

Ka met u briw ka long sriem kum ka kor lane ka bajo. tang ba ka
met ka long ka jingthaw kaba kham phylla bad kham maian.

Hapoh ka met u briw don u klong snam, u tor, ki snir, ki thied.
ki-jaw, ka snieh, bad kine baroh ki don la ka bynta-bynta ba'n trei
na ka bynta ka jingkoit ka met.

Katno kaba korder kane ka jingkoit-jingkhiah ka long! Lada duh
ia kane, ka met bad ka mynsiem ki shitom. Haba pang ka met, ka
trei ha ka jingmut u briw. haduh ba u'm nang pyrkhat bha shuh.
Namarkata, ngi dei ban ialeh katba lah ba'n sumar ia la ka met.
Ha ba kitei ki dykhot jong ka met baroh ki iaid beit, ngi ong ba ka
met ka koit.

Uwei u briw ha ri Phrans u kuah tip noh teh da kumno u lah ba'n
ioh ka jingsuk, bad spah, bad bor. Ki la iathuh ha u ba ha kawei
ka phud wah ha ki lum Pyrenis u don u'kain stem, te lada u'n tang
shu ioh ia uta, ka spah ruh u'n ioh, ka bor ruh u'n ioh. Ia uta u'ka-
in stem dei ba'n kem ha ka jar ha la thain da u sniuh uba jan eh ia
ka jabiong, bad dei ba'n wich ia uta ha ka um se'p bad ka snam.
Uta u briw u ia leit bran sha kata ka phud wah, hangta u la wad u
la it, bad shisha u la iohi ia uta u'kain stem. Bad miet bad sngi u
la beh ia u ; ia ka riat ia ka ram u la hiar, ia ka thiop ia ka at u la kiw,
u la phrung ia ka byniap, u la rung ia ka khlaw ia ka bytap; la kad
sa ki jain, la tar sa u shiah ia ka met; la katta ruh u ia beh iap hi
ia uta u'kain stem.

6. Translate into Khasi :— 15

(a) Wherefore is there a price in the hand of a fool to get wisdom,
seeing he hath no heart to it ?

(b) Excellent speech becometh not a fool : much less do lying lips
a prince.

(c) A man hath joy by the answer of his mouth : and a word
spoken in due season, how good is it !

(d) He that is surety for a stranger shall smart for it : and he that
hateth suretyship is sure.

(e) Yet a little sleep, a little slumber, a little folding of the hands
to sleep.

(f) So shall thy poverty come as one that travelleth, and thy
want as an armed man.

(g) Look not thou upon the wine when it is red, when it giveth
his colour in the cup, when it moveth itself aright.

(h) Remove not the ancient landmarks; neither oppress the af-
flicted in the gate.

7. Mention as many as you can of the characteristics of the vir- 15
tuous woman as set forth in the text.

BURMESE.

(*For Female Candidates*).

Examiner—MAUNG KO KO GYI.

The figures in the margin indicate full marks.

1. Translate into Burmese any *two* of the following :—   40

(*a*) The most common service which the higher animals perform for each other is the warning each other of danger by means of the united senses of all. Every sportsman knows how difficult it is to approach animals in a herd or troop. Wild horses and cattle do not make any danger-signal ; but the attitude of any one, who first discovers an enemy, warns the others. Rabbits stamp loudly on the ground with their hind-feet as a signal : sheep and chamois do the same, but with their fore-feet, uttering likewise a whistle. Many birds and some mammals post sentinels, which in the case of seals are said generally to be the females.

(*b*) The true metal of a golden deed is self-devotion. Selfishness is the dross and alloy that gives the unsound ring to many an act that has been called glorious. And on the other hand it is not only the valour which meets a thousand enemies upon the battlefield, or scales the walls in a forlorn hope, that is of true gold. It may be, but often it is mere greed of fame, fear of shame, or lust of plunder. No, it is the spirit that gives itself for others—the temper that for the sake of religion, of country, of duty, of kindred—nay of pity even to a stranger—will dare all things, risk all things, endure all things, meet death in one moment, or wear life away in slow suffering.

(*c*) In the battle of Zutphen, fought in the cause of liberty against the tyrant Philip of Spain, Sir Philip Sidney displayed the most undaunted and enterprising courage. He had two horses killed under him, and, whilst mounting a third, was wounded by a musket-shot out of the trenches, which broke the bone of 'his thigh. He had to walk about a mile to the camp ; and being faint with loss of blood and parched with thirst, he called for drink, which was instantly brought him ; but as he was putting the vessel to his mouth, a poor wounded soldier, who happened to be carried by him at that instant, looked at it with wistful eyes. The gallant and generous Sidney took the bottle from his mouth without drinking, and handing it to the other, said : " Thy necessity is yet greater than mine."

2. Form sentences to illustrate the use of the following :—   20

အကန့်အကွက်။။ ကြီးကြား‌ကြီးကြဲား။။ ယယ်စဉ်တောင် ကျေး။။ စိတ်ပါကိုယ်ရောက်။။ ဆွေအားမျိုးအင်။။ ရိုးရိုးရှုရှု။။ ဖွဲတင်ထပ်။။ ပျုပျုငှ့ါငှ့ါ။။ မထောင်းတာ။။ ရီစပ်းသက်ရန် ထိုင်း။။

3. Write an essay in Burmese on the following subject :—   **40**

Punctuality.

(*a*) The habit of punctuality.
(*b*) Should be taught to children while at school.
(c) An unpunctual man neither liked nor trusted.
(*d*) Punctuality essential to success in life.

BURMESE.

(*For Female Candidates*).

ADDITIONAL PAPER.

Examiner—MAUNG KO KO GYI.

The figures in the margin indicate full marks.

1. Translate into Burmese any *two* of the following :—   **40**

(*a*) An old farmer called his three idle sons around him when on his death-bed to impart to them an important secret. "My sons," said he, "a great treasure lies hid in the estate which I am about to leave to you." The old man gasped. "Where is it hid?" exclaimed the sons in a breath. "I am about to tell you," said the old man; "You will have to dig for it—" but his breath failed him before he could impart the weighty secret; and he died. Forthwith the sons set to work with spade and mattock upon the long neglected fields, and they turned up every sod and clod upon the estate. They discovered no treasure, but they learnt to work; and when the fields were sown, and the harvests came, lo! the yield was prodigious, in consequence of the thorough tillage which they had undergone.

(*b*) At the entrance of a wood a short distance from us we saw a fire round which a party of the inhabitants was assembled. We repaired thither in order to rest ourselves till the morning. While we were seated near this fire, one of the bystanders related that late in the afternoon he had seen a vessel in the open sea driven towards the island by the current, that the night had hidden it from his view, that two hours after sunset he had heard the firing of signal-guns of distress, but that the surf was too high to enable them to launch a boat to go off to her, that a short time after he perceived the glimmering of the watch lights on board the vessel which he feared by its having approached so near the coast had steered between the mainland and the little island of Amber, and that if this were the case, of which however he would not take upon himself to be certain, the ship he thought was in very great danger.

(*c*) In education the thorough mastery of the elementary subjects is the prevention of what cannot be cured afterwards. When prevention is taken into account accidents will be averted, deaths delayed, sickness almost unknown. Animals and plants, especially when wild, show us how to prepare for the future; we see both laying up stores and preparing for hostile attacks. Thus in everything care is neces

sary, and those who begin any affair carelessly are almost always brought to a sudden standstill. The need of care shows that there has been thoughtlessness somewhere, and we are reminded of the quotation " Evil is wrought by want of thought as well as by want of heart," and it is evils of this kind that are most numerous and need most trouble in curing.

2. Write sentences using the following expressions:—   20

မိရိုးဘလာ။ ထီးရိုးနန်းစဉ်။ ရပ်ဆွေရပ်မျို။ တောကြို့ တောင်ကြုံး။ သားစဉ်မြေးဆက်။ တိမ်းတီထိမ်းပါး။ တပိတ်တဖေသ။ ရွပ်ရွပ်ချွိချွိ။ သက်စွဲရွိ့ကြိုးပန်း။ မငှ မရှား။

3. Write an essay in Burmese on *Idleness*—   40

    (a) The father of other evils.

    (b) An idle man not only makes no progress, but he must become worse.

    (c) An idle man cannot be happy. (Why ?)

    (d) Those who are not obliged to work for their living are less fortunate than those who have to earn their livelihood.

BENGALI COMPOSITION.

Paper-setters— ⎰ Hon. Justice Sir Asutosh Mukherjee,
Kt., C.S.I., M.A., D.L.
Rai Saheb Dineschandra Sen, B.A.
Pandit Rajendranath Vidyabhushan.

*Head Examiner—*Rai Saheb Dineschandra Sen, B.A.

Examiners—

Babu Kumadinikanta Ganguli, B.A.
Babu Anilchandra Mukherjee, M.A.
Babu Hemadakanta Chaudhuri, M.A.
Babu Kumudranjan Mallik, B.A.
Babu Balailal Datta, B.A.
Babu Pyarimohan Banerjee, B.A.
Babu Manmathanath Mustaphi.
Babu Pransankar Sengupta, M.A., B.L.
Babu Jajneswar Banerjee.
Babu Kalipada Mukerjee.
Babu Ranendranath Gupta, Kaviratna.
Babu Jyotischandra Chatterjee.
Babu Nabakrishna Bhattacharyya.
Babu Munindraprasad Sarbadhikari.
Rai Saheb Haranchandra Rakshit.
Babu Rasamay Laha.
Babu Haranath Basu.
Babu Jaladhar Sen.
Babu Jatindramohan Ray.
Babu Basantaranjan Ray.
Babu Nabakanta Guha.
Babu Manilal Ganguli.
Mrs. Hemlata Sarkar.
Maulavi Abdul Karim.
Maulavi Abdur Rahim.
Maulavi Abdul Jabbar.
Babu Kalidas Chaudhuri, B.A.
Babu Manmathanath Ghosh, M.A.
Babu Debkumar Raychaudhuri.
Babu Umapada Ray.
Babu Akshaykumar Baral.
Babu Bhabasindhu Datta.
Babu Hemchandra Ray.
Babu Jatindramohan Bagchi, B.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1.   Translate *any two* of the following extracts into Bengali :—

(*a*) The wife of a rich man fell sick: and when she felt that her   20
end was near, she called her only daughter to her bedside, and said,
'Always be a good girl and I will look down from heaven and watch
over you.'   Soon afterwards she shut her eyes and died, and was
buried in the garden ; and the little girl went every day to her grave,
and wept, and was always good and kind to all about her.   And the
snow spread a beautiful white covering over the grave, but by the
time the sun had melted it again, her father had married another
wife.

(*b*) A merchant, who had three daughters, was setting out upon   20
a journey ; but before he went he asked each daughter what gift he
should bring for her   The eldest wished for pearls, the second for
jewels; but the third said, 'Dear father, bring me a rose.'   Now it
was no easy task to find a rose. it was the middle of winter ; yet as
she was the fairest daughter, and was very fond of flowers. her father
said he would try what he could do.

(*c*) 'Dear children,' said a poor man to his four sons, 'I have   20
nothing to give you; you must go out into the world and try your
luck.   Begin by learning some trade, and see how you can get on.
So the four brothers took their walking-sticks in their hands and
their little bundles on their shoulders, and, after bidding their father
good-bye, went all out at the gate together.   When they had got on
some way they came to four crossways, each leading to a different
country.

2.   Re-write the following extract, correcting all errors :—   8

তাহার সংগে কথা বলিলেই বুঝিতে পারিবে, সে অতি পাপিষ্ট ;
সে তাহার বৃদ্ধ পিতামাতার প্রতি যেরূপ ব্যবহার করে তাহা অতি
নিচ ; তাহার বন্ধুগণেরা তাহার প্রতি অনুযোগ দিয়া থাকে, কারণ
সে তাহাদিগকে অশদ্ভাব করে ও কটু বাক্য বলে ।

3.   Fill up the ellipses in the following passage :—   6

সে যতই ক্রুদ্ধ হইতে লাগিল, আমি ——তাহাকে মিষ্ট কথা
——লাগিলাম ।   কিন্তু কিছুতেই——শান্ত করিতে পারিলাম না ।
বারংবার—— করিয়াও যখন বিফল হইলাম, তখন আমিও রাগিয়া
উঠিলাম ।   আশ্চর্য্যের——এই যে আমার রাগ দেখিয়া সে——
পাইল, তাহার স্বর নামিয়া গেল ।

4.   Form sentences to illustrate the use of নিবন্ধন, বাহুল্য, বিপরীত,   6
and ঐকান্তিক, and also to show the difference in meaning between
বীণা—বিনা and ঝড়—রৌদ্র,

Either,

5.   Write an essay on *any* of the following subjects :—   40

(*a*) The value of time.

(*b*) Honesty is the best policy.

Or,   .

Give an account of a journey that you may have undertaken by   40
boat, steamer, or railway.

HINDI COMPOSITION.

Paper setters— { BABU RADHAKRISHNA JHA, M.A.
{ BABU RAJENDRAPRASAD, M.A.

Examiners— { BABU SIBNARAYAN LALA.
{ BABU BRAJAMOHAN THAKUR, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into Hindi *any two* of the following:—

(a) *The Yaksha.*—By what, O king—birth, behaviour, study, or 20 learning—doth a person become a Brāhmana ?

Yudhisthira.—Listen, O Yaksha! It is neither birth nor study nor learning that is the cause of Brāhmanhood. Without doubt it is behaviour that constitutes it. One's behaviour should always be well guarded, especially by a Brāhmana. He who maintains his conduct unimpaired is never impaired himself. He, however, whose conduct is lost, is lost himself. Professors and pupils, if addicted to wicked habits, are to be regarded as illiterate wretches He only is learned who performs his religious duties. He even that has studied the four Vedas is to be regarded as a Sudra, if his conduct be not correct.

The Yaksha —Who is truly happy ? What is most wonderful ?

Yudhisthira.—A man who cooks in his own house scanty vegetables on the fifth or the sixth day, but who is not in debt and who stirs not from home, is truly happy. Day after day countless beings are going to the abode of Yama, yet those that remain behind believe themselves to be immortal. And what can be more wonderful than this ?

(b) And Satyavān sweetly said unto Sāvitrī, ' Behold these rivers 20 of sacred currents and these excellent trees decked with flowers!' But the faultless Sāvitrī continued to watch her ford in all his moods, and recollecting the words of the Sage, she considered her husband as already dead.

The powerful Satyavān then, accompanied by his wife, plucked fruits and filled his wallet with them. And he then began to fell branches of trees. And as he was hewing them, he began to perspire. And in consequence of that exercise his head began to ache. And afflicted with toil he approached his beloved wife, and addressed her, saying, ' O Sāvitrī, owing to this hard exercise my head aches, and my limbs and my heart also are afflicted sorely! I think myself unwell. I feel as if my head was being pierced with numerous darts. Therefore, O auspicious lady, I wish to sleep, for I have not the power to stand.'

(c) Some of you have heard, no doubt, of the wise King Ulysses, 20 and how he went to the siege of Troy, and how, after that famous city was taken and burned, he spent ten long years in trying to get back again to his own little kingdom of Ithaca. At one time, in the course of this weary voyage, he arrived at an island that looked very green and pleasant, but the name of which was unknown to him. For only a little while before he came thither he had met with a terrible hurricane, or rather a great many hurricanes at once, which drove

his fleet of vessels into a strange part of the sea, where neither him-
self nor any of his mariners had ever sailed. This misfortune was
entirely owing to a foolish curiosity of his shipmates, who, while
Ulysses lay asleep, had untied some very bulky leathern bags in
which they supposed some valuable treasure to be concealed. But
in each of these stout bags King Æolus, the ruler of the winds, had
tied up a tempest, and had given it to Ulysses to keep, in order that
he might be sure of a favourable passage homeward to Ithaca.

2. Re-write the following, correcting errors :—   5

मैं ने सादर पूर्वक उसको भरोसा दिलवाया । मैं धेर्य नहीं
हुआ । आगे हुये अनिवार को वे सब अकेले जायंगे । अब सोहन
यौवन हो गया है । क्यों प्रण भङ्जन करते हो ।

3. Convert the following complex sentences into compound, and   5
vice versa :—

यदि उसे पैसा दो तो वह तुम्हें धनवाद देगा । मैं ने
कुछ पेड़ लगाये थे वे अब फलते हैं । आगरे में जो ताजमहल है
उसे शाहजहां ने बनवाया था । वह देखने में तो भला मालूम
पड़ता है परन्तु सचमुच में बड़ा खोटा है । वह दरिद्र होकर भी
उदार है ।

4. Expand the central idea of the following in Hindi :—   10

"निज भाषा उन्नति अहै सब उन्नति को मूल ।
बिन निज भाषा ज्ञान के मिटत न हिय को सूल" ॥

5. Write an essay on *any one* of the following in Hindi :—   40
    (*a*) ' Town life and country life—the better of the two.'
    (*b*) Describe any railway journey that you have performed.
    (*c*) Write a letter to your younger brother, advising him to take
care of both health and study.

URDU COMPOSITION.

Paper-setters— { KHAN BAHADUR MAULAVI MD. IBRAHIM, B.A.
MAULAVI MD. MUSTAPHA KHAN, M.A., B.L.

*Head Examiner—*MR. S. KHUDA BUKHSH. M.A.. B.C.L.

Examiners-
MAULAVI MD. ABDUL HAMID.
MAULAVI MD. YUNUS.
MAULAVI ABDUL HADI.
MAULAVI A. M. MD. WAZI.
MAULAVI S. M. MASIH.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1.   Translate into Urdu *any two* of the following passages :—

(*a*) He examined the jar on all sides, he shook it to see if it would   20
rattle.   But he heard nothing, and so, judging from the impression
of the seal and the lid, he thought there must be something precious
inside.   To find out, he took his knife, and with a little trouble he
opened it.   He turned it upside down, but nothing came out, which
surprised him very much.   He set it in front of him, and whilst he
was looking at it attentively such a thick smoke came out that he
had to step back a pace or two.   This smoke rose up to the clouds,
and stretching over the sea and the shore, formed a thick mist, which
caused the fisherman much astonishment.   When all the smoke was
out of the jar it gathered itself together, and became a thick mass in
which appeared a genius, twice as large as the largest giant.   When
he saw such a terrible-looking monster, the fisherman would like to
have run away, but he trembled so with fright that he could not
move a step.

(*b*) A cobbler, unable to make a living by his trade, rendered des-   20
perate by poverty, began to practise medicine in a town in which he
was not known.   He sold a drug, pretending that it was an antidote
to all poisons, and obtained a great name for himself by long-winded
advertisements.   He happened to fall sick himself of a serious illness,
on which the Governor of the town determined to test his skill.   For
this purpose he called for a cup, and while filling it with water pre-
tended to mix poison with the cobbler's antidote, and commanded
him to drink it on the promise of a reward   The cobbler, under the
fear of death, confessed that he had no knowledge of medicine, and
was only made famous by the stupid clamours of the crowd.   The
Governor called a public assembly, and thus addressed the citizens :
' Of what folly have you been guilty ?   You have not hesitated to
entrust your heads to a man whom no one could employ to make even
the shoes for their feet.'

(*c*) Dear Isaac,—It grieves me very much that you again request   20
me to send you a sum of money that it is utterly out of my power to
afford you.   You are fully aware of the sacrifices I am obliged to
make in order to pay your school bills and to keep you clothed as

9

well as your companions. I do not wish to deprive you of these advantages, and am willing to some personal privations in order that you may have a good education, but when you indulge in unnecessary expenses I feel it my duty to remonstrate with you. Your little brothers will naturally look for the same advantages that you enjoy, and the closest economy will not more than enable me to educate them. Justice to them compels me to refuse your unreasonable requests in future, and I hope that your own affection and good sense will prevent you again making such a heavy demand as your last on my slender purse.

2. Form sentences to illustrate the use of the following idioms :—   8

زهر أگل ڈالنا - جوتیاں چٹھانا - سر چڑھهنا - بهانجی مارنا *

3. Compose a letter to your guardian about the progress you are   12 making in your studies.

4. Write an essay in Urdu on *one* of the following subjects :—   40
   (a) A village scenery.
   (b) A football match.
   (c) A bazaar in an Indian town or village.
   (d) A journey by boat or steamer.

ASSAMESE COMPOSITION.

Paper-setters— { SRIJUT NABINCHANDRA BARDOLAI, B.A.
               ,,   PADMANATH BARUYA. B.A.

Examiner—SRIJUT LAKSHMIKANTA SARMA, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into Assamese :—
   (a) A gnat came and said to a lion, ' I do not the least fear you,   20 nor are you stronger than I am.' For in what does your strength consist ? You can scratch with your claws, and bite with your teeth —so can a woman in her quarrels.—I repeat that I am altogether more powerful than you ; and if you doubt it, let us fight and see who will conquer.' The gnat having sounded his horn, fastened itself upon the lion, and stung him on the nostrils and the parts of the face devoid of hair. The lion, trying to crush him, tore himself with his claws, until he punished himself severely. The gnat thus prevailed over the lion, and, buzzing about in a song of triumph, flew away.

   (b) Two soldiers travelling together were set upon by a robber.   20 The one fled away ; the other stood his ground, and defended himself with his stout right arm. The robber being slain, the timid companion runs up and draws his sword, and then, throwing back his travelling cloak, says, ' I'll at him, and I'll take care he shall learn whom he has attacked.' On this, he who had fought with the robber made answer, ' I only wish that you had helped me just now, even if it had been only with those words, for I should have been the more

encouraged, believing them to be true ; but now put up your sword in its sheath and hold your equally useless tongue till you can deceive others who do not know you.'

(c) A farmer's daughter was carrying her pail of milk from the 20 field to the farm-house, when she fell a-musing. ' The money for which this milk will be sold, will buy at least three hundred eggs. The eggs allowing for all mishaps, will produce two hundred and fifty chickens. The chickens will become ready for the market when poultry will fetch the highest price ; so that by the end of the year I shall have money enough to buy a new gown. In this dress I will go to the Christmas dances, when all the young fellows will propose to me, but I will toss my head, and refuse them every one.' At this moment she tossed her head in unison with her thoughts, when down fell the milk-pail to the ground, and all her imaginary schemes perished in a moment.

2. Render into modern Assamese :— 4

(a) হে বালক সব দেখা কেনে ৱম্য স্থান যাত সকল কেলি কৰিতে পাৰি ।

(b) তাক দেখি লোক সব নষ্ট-দৃষ্টি টৈহুৱা প্ৰণাম কৰি হৃধ্য আসন্ত বুলি কুঞ্জত কহিল ।

3. Construct short sentences showing the use of the following words 10 and phrases :—

(a) হাম্বাও কাঢ়িলে ; (b) আঁহিলা ; (c) বাঞ্জত বৱচুবিয়াব ফেব, ভিঙৰত ঢকুৱাব বেৰ ; (d) লয়-লাস ; (e) জীয়াতু ৷

4. Explain the idea contained in the following passage and state 6 it shortly and succinctly ;—

মহৎ লোকৰ বাঞ্ছাৰ দিক্ এটা, দ্বিতীয় নাই । তেওঁ লোকৰ ইচ্ছা, বাঞ্ছা, কামনা, অভিপ্ৰায় সকলো কেৱল পৰোপকাৰমুখে বহমান ।

5. Write an essay in Assamese on *any one* of the following sub- 40 jects :—

(a) একাগ্ৰতা ।

(b) মৱমৱ আই ।

(c) টোপনি ।

(d)   ন বছৰৰ নতুন দিনত,
      হৃপূজি মাৰাক হেৱা,
      স্বৰ্গৰো অধিক জনম ভূমিক
         কৰিবা নে বিহ-ছেৱা ?

ORIYA COMPOSITION.

Paper-setters—{ BABU ARTABALLABH MAHANTI, M.A.
{ BABU KASINATH DAS, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into Oriya :—   40
    (*a*) Once upon a time four Brahmans were going on a journey
when they met a soldier, who cried out ' Victory to my lord !' All
four replied with a blessing, and then quarrelled amongst themselves
as to which of the four had been saluted by the soldier. Accordingly
they ran back and put the question to the soldier, who replied that
his salutation was intended for the greatest fool of the four. The
four Brahmans next quarrelled as to which of them was the greatest
fool. Accordingly they proceeded to a neighbouring village and put
the question to the elderly persons who were assembled there in a
Dharmashala. The four persons, being asked, narrated their stories
in turn and excited laughter of the people assembled.

(*b*) In a season of great famine, a young boy, very poor, named
Paul, came down from the mountains and went into the neighbour-
ing village to ask alms at the doors of the rich. Peter, the son of a
rich man, was sitting before his door, holding in his hand a big piece
of bread. ' Give me a bit of that bread ', said poor Paul, ' I am
very hungry.' But Peter answered him rudely, ' Go away, I have no
bread to give you.' A year after Peter went up into the mountains in
search of a missing goat and at last saw the poor Paul sitting under
the shade of a tree and watching his sheep. A pitcher of water was
at his side. ' Give me to drink,' said Peter, ' I am very thirsty.'
Paul gave him water to drink and said, ' I have not a heart so hard
as to refuse you a little water.' At this Peter was much ashamed
and begged pardon of the poor little shepherd.

(*c*) If a king, or a minister, or a brāhmana, or a householder, or
a townsman, or a villager, or a rich man, or a trader, sends through
a servant the price of a set of robes for a certain monk, and if the
servant going to the monk gently says : ' O Sir, the price of a set
of robes has been sent through me to you, graciously accept it,' then
the monk should answer the servant thus : ' O friend, it is not pro-
per for us to accept the price of robes, but we can accept a set of
robes .' If a monk, while he is on a journey, gets some wool, he
should accept it if he likes ; and having accepted it he should carry
it in his own hand for a distance of three miles. If he carries it
farther he commits a sin. If a monk receives gold or silver he com-
mits a sin.

2. Fill up the ellipses with appropriate words in the following :—   5

ସଂସାରରେ——ଯାଞ୍ଚ। ନର୍ବାହ——ଗଲେ ମାନବ ——ଅନେକ
——ବ୍ ଅଇକ୍ରମ——ପଡେ। ମାନବ——ଏକ——ଉଦ୍ବେଶ୍ୟ ଅଛ ।
ସେହ——ପ୍ରଢ ଯଦ୍ୟପି ସେ ମନଃପ୍ରାଣ——ନ୍ଦ୍ବ, ତେବେ ଭାହାର
ସମସ୍ତ——ରୁଥା ।

3. Form sentences, using adjectives from the following words:—   5

ବୃଷି, ସ୍ଵୟଂ, ଶକ୍ତି, ଅଭ୍ୟନ୍ତର, ବର୍ଷ, ଜାଡ଼, କଳ୍ପନା, କୂଲ,
ବଦେଶ, ପିତୃ ।

4. Re-write the following in simple language:—   ·0

ସାଧୁ ଅଥବା ସଂସ୍କୃତ ଶବ୍ଦବହୁଳ ଭାଷାର ଏକ ବଶେଷ ଉପକାରିତା
ଅଛ୍ଛ । ସେ ଉପକାରିତା ସମସ୍ତ ଭାରତବର୍ଷର କୌଣସି ବଶିଷ୍ଟ ପ୍ରଦେଶର
କୁହେଁ । ଉତ୍ତର ଏକ ପାଶ୍ଚାତ୍ୟ ଭାରତବର୍ଷର ଭାଷା ଆର୍ଯ୍ୟଭାଷା—
ସଂସ୍କୃତ ମୂଳକ । ସେ ସମସ୍ତ ଭାଷା ପ୍ରାକୃତର ରୂପାନ୍ତର । ବାହ୍ୟତଃ
ହିନ୍ଦି, ବଙ୍ଗଲା ଓ ଓଡ଼ିଆ ଭାଷାମାନେ ପୃଥକ୍ ପୃଥକ୍ ରୂପେ ପ୍ରଜ୍ଜୟମାନ.
ହୁଅନ୍ତୁ କଳୁ ସେମାନଙ୍କର ମୌଲିକ ଉପାଦାନ ଅଭିନ୍ନ । ସଂସ୍କୃତ
ମୂଳକ ଶବ୍ଦ ଅଧିକ ପରମାଣରେ ବ୍ୟବହୃତ ହେଲେ ପ୍ରାଦେଶିକ ଭାଷା
ସମୂହର ଏକତ୍ଵ ସଂଖାଦିତ ହୋଇ ପାରିବ । ଏହା ଅଧିକତର ସୈହର୍ଦ୍ଦ
ଓ ସମସ୍ୟୁ୍ୟାପେକ୍ଷ ।

5. Write an essay on *one* of the following subjects:—   40

(a) ଦେବା ଦିଆନ୍ତାବାକୁ ହିତ
          କରିଥା ଅଠନ୍ତି ସବୁର ।

(b) ଜ୍ୟୋଠ ବୃଷ ।

(c) ଗୁରୁ ଭକ୍ତି ।

(d) ନାଗରିକ ଜୀବନର ଉପକାରିତା ।

(e) କୌଣସି ଉତ୍କଳୀୟ ମହାତ୍ମାଙ୍କର ଜୀବନ ଚରିତ୍ର ।

(f) ଗ୍ରୀଷ୍ମ କାଳୀନ ଗ୍ରାମ୍ୟଶୋଭା ।

BURMESE COMPOSITION.

Paper-setters { MAUNG WE LIN, ESQ.
{ MAUNG TIN. ESQ., M.A.

Examiners— { MAUNG KYAW DIN, ESQ.
{ MAUNG BA. ESQ.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate the following into Burmese :—   **40**

I. walked for some distance at first, partly because the ground was
very stony, and partly because I thought a lion might suddenly bound
out of some likely patches in front of the beaters; but after having
gone about six miles in this way without adventure of any kind, I
decided to mount again. At this time the beaters were in line about
a hundred yards behind me, shouting and halloing with all their
might as they advanced through the scrub and undergrowth, while I
rode well to the flank so as to be ready for any emergency. Just as
the men got up to a rather thicker piece of jungle than usual, I fan-
cied I saw a movement among the bushes, and pulled up suddenly
to watch the spot, but did not dismount. The next moment out
bounded a lioness, quickly followed by another. Throwing myself
off my pony, I seized my rifle to get a shot at the second lioness as
she galloped past, and was just about to pull the trigger, when, to
my utter amazement, out sprang a huge black-maned lion, making
all haste after his mates. Before he could reach the farther thicket,
however, I fired, and had the satisfaction of hearing the deep growl
that tells of a serious hit.

2. Correct the errors in spelling, if any, in the following passage :—   6

ထိုစကားကိုကြဲားလျှင်။ ဟိမဝန္တာခ္ဘီ့ဘား ရန်ကိုပြ၍
ခြေ့ယှက်နှိန်းထိုသောကြောင့်။၍သို့ဆိုပြန်၏။"င}ခ္ျုးမမ္ဘီ့။
ငါဆိုသောစကားကိုသင်နာယူလေ}။ တောအရပ်ဟူ့ဘ
ည်ကား။ ၍နန်းပြတ်သန်မှာကဲ့ဘို့မဟုတ်။ ပေါက်ဖတ်
ကင်းသန်းနှံ့ မှက်ချင်ထင်ပြား တို့ဘသည်များစွာရှိကုန်၏။
သို့သတ၀ါတို့၏ကိုက်ခဲခြင်းဆင်းရဲကိုအလွန်သီးခန်နိုင်
ခဲ၏။ ထိုသို့သောဆင်းရဲကိုသင်သီးမခန်နိုင်ပြစ်လတံ့။
၍မှတပါးလည်း လူတို့၏ခ္ဘီ့ဘားရန်ကိုပြုတတ်လျက်။ မြစ်
 နှား အိုင်နှားကိုအစ္ဘီ့ပြု၍နေကုန်သောစဗကြီးမွေ့တို့သည်

ကါး။ အဆိတ်မရှိသော်လည်းကြီးသောခွန်း အားရှိသော
ကြောင့်။ မိမိအနီးသို့ရောက်လါသောလူသမင်ပိုင်ဆပ်
သစ္စဝါတို့ကိုအခွေဖြင့်ပတ်ယစ်၍။အလိုရှိတိုင်းနှိပ်စက်
တတ်ကုန်၏။

3. Combine the following sentences :— 8

(a) အိမ်ရွှေမင်းသည်လည်းတလုံးမျှသာဆွတ်ချူစား၏။

(b) မင်းကြီးကဲ့သို့ပင်တသုံးမျှသာဆွတ်ချူစား၏။

(c) ဆွတ်ချူစားပြီး၍နောက်တော်သို့လိုက်ရ၁လ၏။ ·

(d) မှူးမတ်ပရိသတ်ဗိုလ်ခြေတို့သည်လည်းဆွတ်ချူပစ်
ခတ်၍စားကြလေကုန်၏။

(e) ၍သရက်သီး၊ိုအံ့ရှင်တို့အားအဦးဆက်၍ချိုးပြိုဟု။
ဆွတ်ချူပစ်ခတ်၍စားကြလေကုန်၏။

(f) အလိုရှိတိုင်းဆွတ်ချူပစ်ခတ်၍စားကြလေကုန်၏။

(g) တတ်အားသမျှဆွတ်ချူပစ်ခတ်၍စားကြလေကုန်၏။

4. Frame sentences to illustrate the use of three of the following 6
expressions :—

(a) ဝတ်ကုန်ဝထ်ကြေ။

(b) လုံ၊လကြိုးကုတ်။·

(c) ရှုက်ကြမ်းရေချို။

(d) ဖြိုးဖြိုးမြက်မြက်။

5. Write an essay in Burmese on *thrift*. 40

By thrift we thrive.—The thrifty man, the spendthrift, and the
miser. The first one alone understands the true worth of money.

How to be thrifty.—Beware of little expenses which can be saved.
' Waste not, want not.'

Thrift, an aid to generosity.—A man who saves nothing can give
nothing.

Extravagance conduces to meanness.—A man who runs to great
expenses tries to recoup himself by being mean to others.

Aids to thrift.— Savings Banks, &c.

MODERN TIBETAN COMPOSITION.

Paper-setter—MAHAMAHOPADHYAYA DR. SATISCHANDRA
VIDYABHUSHAN, M.A., PH.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into Modern Tibetan *any two* of the following passages :—

(*a*) In the far-away days, before men had learned many truths 20
which they now know, they believed that for a long time man lived
by himself without the companionship of wife or sister ; and sometimes, when vexed by their fair companions, or tormented, it may be,
by their own selfishness, they would invent stories telling that woman
was sent upon earth to bring evil into their lives. Evidently they
did not wish to remember the many blessings which they owed to her.
Some of these stories remind us of our first mother, and the one I
am going to tell is about a fair woman who, like Eve, brought misfortune to her husband as well as blessings.

(*b*) Once upon a time there was a great, great flood over all the
earth. Some wicked people had angered the gods, and Jupiter sent
all the waters of the earth and sky to cover the world. He did not
want the waters to dry up until all the people were dead, so he shut
fast in their caverns all the winds except the south wind, which was
sometimes called the messenger of rain. And Jupiter sent this messenger of his to wander over all the earth. A mighty figure of ruin
he was, as he swept along, emptying the clouds as he passed. His
face was covered with a veil like the night, his beard was loaded with
showers, and his wings and the folds of his cloak were dripping wet.

(*c*) The lion, the ass, and the fox formed a party to go out hunting. They took a large booty, and when the sport was ended bethought themselves of having a hearty meal. The lion bade the ass
allot the spoil. So, dividing it into three equal parts, the ass begged
his friends to make their choice ; at which the lion, in great indignation, fell upon the ass, and tore him to pieces. He then bade the
fox make a division ; who, gathering the whole in one great heap,
reserved but the smallest mite for himself. ' Ah ! friend,' says the
lion, ' who taught you to make so equitable a division ? ' ' I wanted
no other lesson,' replied the fox, ' than the ass's fate.'

2. Turn the following into Modern Tibetan :— 6

(*a*) First you must turn to the right, then to the left, and then
go straight on a distance of about twelve paces.

(*b*) You may do as you please.

(*c*) It is better to be here than there.

3. Turn the following into English :—

(a) ང་འགྲོ་ན་ཅི་མ་རུང་ །

(b) ཁྱེད་ཀྱིས་གཏོང་བས་ཚོག་གོ །

(c) མིའི་སྐྱིང་གི་ནང་ལ་གང་གང་ཡོད་པ་དེས་ཁོའི་སྟོག་

སྐྱང་ཁ་བསྐྱལ་ཡོང་ །

4. Correct the following:— 8

(a) སུས་བྲོས་ཕྱིན་ན་ཡངས་ཉིང་ཆུངས་ཆུངས་རེད །

(b) མི་སད་མཁན་གི་ཁུ་དེ་ཉིན་མི་དུག །

(c) ལམ་ག་རེ་ཕ་གྱི་ཁང་པ་དག་ག་ཚམ་ཞིག་ལ་གྲོ་གི །

(d) ང་དའི་ཚ་དེ་སྐྱིག་ཚར་གི་ཡོད །

5. Write an essay in Modern Tibetan on *one* of the following 40 subjects:—

(*a*) The rainy season.

(*b*) Honesty is the best policy.

(*c*) The town or village in which you were born—its boundary, area. population, roads, buildings, sources of amusement, health, scenery, &c.

KHASI COMPOSITION.

Paper-setter—U. ALEXANDER, ESQ., B.A., B.T.

Examiner—ROY ROWLAND THOMAS, ESQ., M.A.

1. Render the following into Khasi:—

(*a*) On Tuesday morning, the letter that Mrs. Jordan had so 20 long and so anxiously looked for arrived ; she was in sore distress—it ought to have reached her a fortnight since and had been delayed. It was from her son, saying how anxiously he was expecting her, enclosing a handsome remittance for her expenses out. In the pride of her motherly love she showed the letter to Daisy. It said:

"No more work, mother. I am a rich man, but I shall never enjoy my riches, until you are here to share them. I have a grand, beautiful house, but it will never be home, until you are in it. I will not return to England. I like America best—men are more equal there—so you must come to me, mother. Come by the Cunard line, and come first class. Have every comfort. You shall not keep house for any one again but me."

"He must be a very kind son," said Daisy as she returned the letter. "You will go, I suppose!" Then a sudden hope throbbed in her heart and flushed her face.

(*b*) "My dear chap, if you come to that, what man is fit to look 20 his children in the face?" he asked impatiently.

But then it occurred to him that he was idealising—a thing he hated.

"Not that children are not wicked little beggars themselves," he added cheerfully. "They steal and lie like anything, and torment one another devilishly. I know I did things as a boy that I would kick any grown man for doing, and so did my brothers and sisters. I tell you what it as, Tom, the devil is there all the time; he shows himself in different ways —that is all."

Tom could not swallow this gospel; he would give up neither his own iniquity nor the halo of purity to which his mind clung amid the sordid ruin of his life and home.

"If I could pull straight," he murmured despairingly. "Why shouldn't you ? You are getting on in life, you know, after all."

"They guess something about it, I expect, Frank. It is not pleasant for a man to be ashamed before his own children. I thought Miss Bligh looked at me queerly at the funeral."

2. Compose sentences to show the idiomatic uses of the following   20
Khasi phrases : —

Kyntiew doh, jied shiah, pynhiar synjat, bamja-khluit, and lait sa ka said.

3. Write an essay in Khasi on : —   40

    (*a*) "No place like home,"

<div align="center"><i>Or,</i></div>

    (*b*) Physical Exercise.

<div align="center">

ENGLISH.

ALTERNATIVE PAPER.

Examiner—W. PAPWORTH, ESQ.

Candidates are required to give their answers in their own wordz as far as practicable.

The figures in the margin indicate full marks.

</div>

Great importance will be attached to clearness and accuracy of expression and style. Answers will be valued according to quality rather than quantity. Neatness of style and originality of composition are desired.

1. Write an essay on *one* of the following subjects : —   30

    (*a*) Gardening as a hobby.

    (*b*) The qualities of an ideal man of business.

    (*c*) The adavntages and disadvantages of conformity to fashion in dress.

2. Write a paragraph on *one* of the following :—   15

    (*a*) Whatsoever thy hand findeth to do, do it with thy might.

    (*b*) Give every man thine ear, but few thy voice.

3. Give in simple English the substance of *one* of the following :— 20

    (*a*) War is the condition of this world. From man to the smallest insect all are at strife; and the glory of arms, which cannot be obtained without the exercise of honour, fortitude, courage, obedience, modesty, and temperance, excites the brave man's patriotism and is a chastening corrective for the rich man's pride. It is yet no

security for power. Napoleon lost by arms Poland, Germany, Italy, Portugal, Spain, and France, Fortune, that name for the unknown combinations of infinite power, was wanting to him, and without her aid the designs of man are as bubbles on a troubled ocean.

(b) He went through life bearing the load of a people's sorrows upon his shoulders with a smiling face. Their name was the last word upon his lips, save the simple affirmative with which the soldier who had been battling for the right all his lifetime commended his soul in dying ' to his great captain, Christ.' The people were grateful and affectionate, for they trusted the character of their 'Father William', and not all the clouds which calumny could collect ever dimmed to their eyes the radiance of that lofty mind to which they were accustomed, in their darkest calamities, to look for light. As long as he lived he was the guiding-star of a brave nation, and when he died the little children cried in the streets.

4. Give in your own words the purport of the following:—   20

    Think not that they are blest alone
Whose days a blissful tenor keep ;
    The God who rules on high hath shown
A blessing for the eyes that weep.
    The light of joy shall fill again •
The lids that once o'erflowed with tears ;
    And weary hours of woe and pain
Are earnests of serener years.
    O ! there are days of joy and rest
For every dark and troubled night.
    For grief may bide an evening guest,
But joy shall come with morning light.

5. (a) Construct sentences to illustrate the difference between a   15
simile and a *metaphor*.

    (b) Compose sentences containing examples of—
(i) Synecdoche, (ii) Metonymy, and (iii) Euphemism.

HISTORY.

Paper-setters—   Babu Adharchandra Mukerjee, M.A. B.L.
       ,, Bepinbihari Sen, M.A.

*Head Examiner—*Babu Bepinbihari Sen, M.A.

Examiners—

Mr. S. K. Ray, M.A.
Babu Haripada Panday, M.A.
Babu Nripendrakumar Datta. M.A.
Babu Upendrakumar Ray, M.A.
Babu Nilratan Mukerjee, M.A.
Babu Narendranath Mukherjee, M.A.
Babu Satischandra Chakrabarti. M.A.
Babu Satischandra Basu, M.A.
Babu Nirmalkumar Gupta, M.A.
Babu Radhakrishna Jha. M.A.
Babu Jibanchandra Talukdar, M.A.
Babu Pareschandra Mukherjee, M.A.
Babu Bidhubhushan Sengupta, M.A.
Mr. Lutifar Rahman.
Babu Jatindrakishore Chaudhuri.
Babu Atalbihari Bhattacharyya. M.A.
Babu Nimaichand Sil, M.A.
Babu Rakhaldas Basu, B.A.
Mr. S. K. Mitra.

(To look over answer-papers written in Vernaculars.)

BENGALI.

Babu Kaliprasanna Banerjee, B.A.
Babu Manmathamohan Basu, M.A.
Babu Kaliprsanna Das Gupta. M.A.
Babu Binaykumar Chaudhuri.

ASSAMESE.

Babu Nabinchandra Bardolai, B.L.

BURMESE

G. J. Munro, Esq.

URIYA.

Babu Nilkanta Das, M.A.

HINDI.

Babu Radhakrishna Jha, M.A.

URDU.

Maulavi Wahid Hossain, B.L.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Only TWO *questions to be attempted in* EACH GROUP.

GROUP A.

1. By what measures did Asoka promote the cause of Buddhism ?   12
Estimate the work done by the several Buddhist councils.

2. What light does Megasthenes' account of India throw on the   12
social and political institutions of the country in the reign of the
first Maurya emperor ?

3. Give a short historical sketch of *each* of the following:—(a)   12
The kingdom of Bactria, (b) the Chola kingdom, (c) the Pal Dynasty
of Bengal, and (d) the kingdom of Thaneswar.

GROUP B.

4. What was the state of Northern India at the time of Babar's   12
invasion ?   Give a sketch of his career and character.

5. Estimate the character of Aurangzebe as a man and as a ruler ;   12
and attempt a rapid survey of the decline of the Mogul Empire from
the death of Aurangzebe to the invasion of Nadir Shah.

6. Explain Lord Wellesley's policy of subsidiary alliances. Des-   12
cribe the circumstances which induced him to interfere in Mahratta
affairs.   What led to his recall ?

GROUP C.

7. How was the East India Company's system of judicial adminis-   12
tration organized and improved by the reforms of (a) Warren
Hastings, (b) Lord Cornwallis, (c) Lord William Bentinck, and (d) by
the Act of 1861 ?

8. Briefly describe the struggle between the English and the French   12
for supremacy in Southern India.

9. Write a short historical note on *each* of the following:—   12
Chanakya, Ibn Batuta, Banda, Amir Khan, Nana Farnavis, and the
Doctrine of Lapse.

GROUP D.

10. Give some account of the different kinds of revenue settlement   14
in British India, and mention the sources of British Indian revenue
other than taxation.

11. Classify the native states of India, giving two examples of   14
each group.   Explain—' A native state has not any international
life.'

12. Write an explanatory note on each of the following :—the   14
Prerogative of Mercy, the Education Dispatch of 1854, Home Charges,
and the Trial by Jury in British India.

GEOGRAPHY.

Paper-setters— { BABU RAMENDRASUNDAR TRIVEDI, M.A.
BABU BIRAJMOHAN MAJUMDAR, M.A., B.L.

Head Examiner— BABU BIRAJMOHAN MAJUMDAR, M.A., B.L.

Examiners— { BABU HEMCHANDRA SANYAL.
BABU JITENDRANATH SEN, M.A.
BABU SURENDRANATH CHATTERJEE, M.A.
BABU SUSILKUMAR ACHARYYA, M.Sc.
BABU SISIRKUMAR MITRA, M.Sc.
BABU ASWINIKUMAR DATTA, M.Sc.
MR. M. SINHA.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. (*a*) Define the latitude and longitude of a place.   10
(*b*) What are the zones ?   Draw a diagram showing the zones and naming their boundaries.   *Either,*

2. What are monsoons ? How are they caused ? Name the   10
regions where they are prevalent.   *Or,*

How are springs formed ? What are thermal springs ? Name any such in India.

3. Explain :   10
(*a*) Why the water of the Mediterranean Sea is salter than that of the Baltic ;
(*b*) Why it is that the higher we ascend in a balloon the colder is the air.

4. Draw a map of the Mediterranean Sea, showing its gulfs, bays,   10
and principal islands.

5. Give a short description of the great central tableland of Asia,   10
with special reference to the principal mountain ranges and plateaus.

6. Where and what are the following : Waterloo, Lyons, Tokio,   10
the Salt Range, Havana, Bueno Ayres, Jamaica, Cotopaxi, Philippines, Ladoga ?   *Either,*

7. Name the counties of England lying on the North Sea, naming   10
one principal town in each.   *Or,*

Give a short account of the following :—Sheffield, Eton, Windsor, Glasgow, Aberdeen, Belfast, Cardiff, Ben Nevis, Loch Lomond, Greenwich.   *Either,*

8. Give a short account of the climate and rainfall of India.   10
Or,

Mention the principal Feudatory States of India. Give a short account of Kashmir, with special reference to its natural features.

9.   Where are the following, and what do you know of them :—the   10
Karakorum Range, Gilgit, Quetta, the Aravalli Range, Bangalore,
Madura, Manas-sarowar, Akyab, Mussoorie the Meghna ?

10.   Name the islands forming the Japanese Empire.   Mention its   10
chief towns.   What are the forms of religion prevalent in Japan ?
To what-race do the Japanese belong ?

MECHANICS.

Paper-setters— { HON. JUSTICE SIR ASUTOSH MUKHERJEE,
KT., C.S.I., M.A., D.L.
BABU JNANCHANDRA GHOSH, M.A.

Examiner—BABU PHANINDRANATH GHOSH, M.A.

Attempt only EIGHT *of the following questions, which are of equal
numerical value.*

*Diagrams must be drawn neatly in pencil.   In awarding marks
attention will be pdid to neatness and cleanliness.*

*Candidates are required to give their answers in their own words
as far as practicable.*

1.   'The acceleration of a falling body at a certain place is 32 ft. per
sec. per sec.'   Explain this statement as clearly as you can.

2.   Prove the formula $s = ut + \frac{1}{2}ft^2$.

3.   State Newton's Second Law of Motion, and show that the weight
of a body is proportional to its mass.

4.   A force of a pound weight acting upon a certain body for a minute
generates in it a velocity of 60 miles an hour.   Find the mass of the body.

5.   Describe an experiment to find the value of g at any place on the
earth's surface.

6.   Enunciate and explain the proposition known as the Parallelogram
of Forces.

7.   Define centre of gravity of a body.   Find the centre of gravity of
a uniform triangular lamina, and show that it is the same as that of three
equal particles placed at the vertices of the triangle.

8.   Define 'moment of a force' about a point.   Prove that the moment
of a couple is equal to the algebraic sum of the moments of the two forces
forming the couple about any point in the plane of the forces.

9.   The line of action of the resultant of two parallel forces of 10 lb.
and 15 lb. weight is 20 ft. from that of the smaller force.   Find the dis-
tance between the lines of action of the two forces.

10.   What is a pulley ?   Draw the diagram of the third system of
pulleys, and find its mechanical advantage.

11.   What is a lever ?   Mention the characteristics of the three kinds
of levers.   Under which kinds of lever would you place the following ?

(*a*) A pair of nut-crackers.
(*b*) An oar of a boat.
(*c*) The treadle of a sewing machine.
(*d*) The forearm when raising a load.

I.A. and I.Sc. Examinations.

1918.

ENGLISH.

Paper-setters—
Hon. Sir Debaprasad Sarbadhikari, C.I.E., M.A., LL.D.
J. R. Banerjea, Esq., M.A., B.L.
J. W. Holme, Esq., M.A.
J. N. Das Gupta, Esq., B.A. (*Oxon*).

First Paper.

Head Examiner—J. R. Banerjea, Esq., M.A., B.L.

Examiners—
Babu Basantakumar Ray, M.A.
Babu Nripendrachandra Banerjee, M.A.
Babu Rampada Majumdar, M.A.
Babu Girijasankar Bhattacharyya, M.A.
Babu Praphullachandra Guha, M.A.
Babu Hirankumar Banerjee, M.A.
Babu Manibhushan Sen, M.A.
Babu Matilal Chatterjee, M.A.
Babu Syamacharan Mukherjee, M.A.
Babu Purnachandra Raichaudhuri, M.A.
Babu Isanchandra Ghosh, M.A.
Babu Gopalchandra Maitra, M.A.
J. N. Rawson, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Either,

1. It has been said that Cowper's *Task* is partly descriptive and partly didactic. Mention the subjects treated in the Fourth Book of the poem which come under each of those heads.   10

Or,

To what does Cowper trace the corruption of country life ?

2. Explain fully with reference to the context *any three* of the   18
following passages :—

    (*a*) So I, with brush in hand and pallet spread
        With colours mixed for a far different use,
        .Paint cards and dolls, and every idle thing
        That fancy finds in her excursive fights.
    (*b*)   In this she lays
        A weight of ignorance ; in that, of pride :
        And smiles delighted with the eternal poise.
    (*c*) Time as he passes us, has a dove's wing,
        Unsoiled and swift, and of a silken sound :
        But the world's Time is Time in masquerade.
    (*d*) ' O evenings worthy of the gods ! ' exclaimed
        The Sabine bard. O evenings, I reply,
        More to be prized and coveted than yours,
        As more illumined, and with nobler truths,
        That I and mine, and those we love, enjoy.
    (*e*)   And though now reclaimed
        By modern lights from an erroneous taste,
        I cannot but lament thy splendid wit
        Entangled in the cobwebs of the schools.

Either,

3. Give in simple English Wordsworth's estimate of the Sonnet.   10

Or,

    Analyse Wordsworth's thoughts embodied in the poem ' To the
Cuckoo,' noticing specially in clear language the idealism taught
in it.

4. Explain fully *any three* of the following passages :—   12

    (*a*) Thus fares it still in our decay :
        And yet the wiser mind
        Mourns less for what age takes away
        Than what it leaves behind.
    (*b*) For oft, when on my couch I lie
        In vacant or in pensive mood,
        They flash upon that inward eye
        Which is the bliss of solitude.
    (*c*) Such ebb and flow must ever be,
        Then wherefore should we mourn ?
    (*d*)   'Twas a day of shame
        For them whom precept and the pedantry
        Of cold mechanic battle do enslave.
    (*e*) 'Tis a note of enchantment ; what ails her ? She sees
        A mountain ascending, a vision of trees.

Either,

5. What in your opinion are the remarkable features of *Sohrab*   10
and Rustum as a poem ? Do you consider it to be an epic ? Give
reasons for your answer.

Or,

Sketch the character of Sohrab.

6. Explain clearly *any two* of the following passages, giving in   12
each case a full exposition of the simile contained in the passage :—

    (*a*) But as a troop of pedlars, from Cabool,
        Cross underneath the Indian Caucasus,

10

That vast sky-neighbouring mountain of milk snow ;
Crossing so high, that, as they mount, they pass
Long flocks of travelling birds dead on the snow,
Choked by the air, and scarce can they themselves
Slake their parch'd throats with sugar'd mulberries—
In single file they move, and stop their breath,
For fear they should dislodge the o'erhanging snows --
So the pale Persians hold their breath with fear.   .

(b) For we are all, like swimmers in the sea,
Poised on the top of a huge wave of fate,
Which hangs uncertain to which side to fall.
And whether it will heave us up to land,
Or whether it will roll us out to sea,
Back out to sea, to the deep waves of death,
We know not, and no search will make us know ;
Only the event will teach us in its hour.

' (c)   And he saw that Youth,
Of age and looks to be his own dear son,
Piteous and lovely, lying on the sand,
Like some rich hyacinth which by the scythe
Of an unskilful gardener has been cut,
Mowing the garden grass-plots near its bed,
And lies, a fragrant tower of purple bloom,
On the mown, dying grass—so Sohrab lay,
Lovely in death, upon the common sand.

7.   (a) What are the respective companions of Mirth and Melan-   9
choly as mentioned by Milton in *L'Allegro* and *Il Penseroso* ?

(b) Johnson says, ' I am afraid that I always meet some melan-   4
choly in his mirth.' Justify this remark on Milton by a reference to
or quotation from *L'Allegro*.

8.   Explain fully *any three* of the following passages :—   15

(a) Then to come, in spite of sorrow,
And at my window bid good-morrow.

(b) The melting voice through mazes running,
Untwisting all the chains that tie
The hidden soul of harmony.

(c) And the mute Silence hist along,
'   ' Less Philomel will deign a song,
In her sweetest saddest plight,
Smoothing the rugged brow of Night.

(d) And let some strange mysterious dream
Wave at his wings, in airy stream
Of lively portraiture displayed,
Softly on my eyelids laid.

ENGLISH.

SECOND PAPER.

Head Examiner—DR. H. C. MUKHERJEE, M.A., PH.D.

Examiners—
{
BABU SURESCHANDRA RAY, M.A.
BABU NARENDRANATH CHAKRABARTI, M.A.
BABU SATYENDRANATH BOSE, M.A.
BABU PRIYANTH CHATTERJEE, M.A.
MISS VICTORIA MUKHERJEE, M.A.
BABU HARANCHANDRA CHAKLADAR, M.A
BABU BHUPENDRACHANDRA BOSE, M.A.
BABU CHARUCHANDRA BISWAS, M.A., B.L.
MISS REJINA GUHA, M.A., B.L.
BABU SAILESWAR SEN, M.A.
BABU RABINDRAMOHAN DATTA, M.A.
BABU MOHINIMOHAN BHATTACHARYYA, M.A.
BABU SOMESWAR MUKHERJEE, M.A.
}

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

SECTION A.

Answer question 1 and ONE *other.*

1. Explain, with reference to the passages in which they occur, 18
three of the following :—
    (*a*) Inside is a treasure greater than either at St. Denys, or Loretto, or Toledo.
    (*b*) She had seen the mole on the thin white hand, exactly like the mole on baby Gerard's. Her search was successful.
    (*c*) The sick man was Gerard, come to end his life as he began it. He entered as a novice, on probation.
    (*d*) We take him to Rotterdam to abide the sentence of the Duke.
    (*e*) 'Heyday,' says she, ' the shafts fly high this morn.' I told her, ' Ay, for they hit the truth.'
2. Write a short description of Gerard's journey to Rome. 16
3. Give a brief character-sketch of Denys of Burgundy. 16

SECTION B.

Answer question 4 and ONE *other.*

4. To what characters in *The Odyssey* do *three* of the following 12
passages refer ? Add notes in explanation of allusions.

(*a*) His character is very like that of the worst stamp of the ' Cavalier' in the days of our own Charles II.

(*b*) A genuine country gentleman of the age of Homer.

(*c*) Their name was held by the Greeks a synonym for all that was dark and barbarous in the mists of antiquity.

(*d*) From this maternal ancestor Ulysses might have inherited a large share of the subtlety which distinguished him.

(*e*) One of the sweetest creations of Greek fiction.

5. Describe briefly the splendours of the palace of Acinous.   18

6. Give in your own words an outline of the adventure of Ulysses   18 with the Cyclops.

SECTION C.

Answer question 7 *and* ONE *other.*

7. Explain *three* of the following passages, with reference to the   18 essays in which they occur : —

(*a*) It is sung by some blind crowder with no rougher voice than rude style.

(*b*) A garden was the habitation of our first parents before the Fall.

(*c*) Dr. Sydenham is very lavish in its praises.

(*d*) Sextus Quintus was not of so generous and forgiving a disposition.

(*e*) This great and learned man. .acted in all parts of life like a second Democritus.

8. Give the substance, in your own words, of the Vision of Mirza.   18

9. Summarize Addison's conclusions on (*a*) Temperance, (*b*) the   18 value of Exercise, and (*c*) withdrawal from the world.

ENGLISH.

THIRD PAPER.

Head Examiner—REV. DR. G. HOWELLS, M.A., PH.D
B.LITT., B.D.

Examiners—
DR. S. K. GUPTA, M.A., B.LITT., PH.D.
BABU BASANTAKUMAR RAY.
BABU GIRINDRANATH CHATTERJEE, M.A.,
B.T.
BABU NARENDRANATH CHATTERJEE, M.A.
BABU ASUTOSH CHATTERJEE, M.A.
BABU SURESCHANDRA SENGUPTA, M.A.
BABU PADMINIBHUSHAN RUDRA, M.A.
BABU BIPINBIHARI GUPTA, M.A.
BABU PULINBIHARI KAR, M.A.
BABU SURENDRACHANDRA GUPTA, M.A.
MR. G. H. MATHEWS, M.A.
BABU KIRANCHANDRA BASU, M.A.
DR. C. H. WATKINS, M.A.
BABU KIRANKUMAR BASU, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Write an essay on *one* of the following subjects:— 25
   (a)   'Tis only noble to be good.
       Kind hearts are more than coronets,
       And simple faith than Norman blood.
   (b) Influence of climate upon character.
   (c) The picturesque and historic features of any town or district
in India you know.

2. Develop the thought contained in the following:— •15
   Howe'er ye babble, great deeds cannot die :
   They with the sun and moon renew their light
   For ever, blessing those that look on them.

3. Give in your own words, as concisely as you can, the substance 20
of *one* of the following passages, and comment on its underlying
idea:—
   (d) What fine fellows are the great explorers ! With what magnifi-
cent chivalry do they go forth to fight the sun, the sea, the snow,
that they may win new lands, new light for the world ! My lady,
Science hath her martyrs among them, not saints indeed, but men
as grand, as brave, and as enduring. The traveller is certainly not
a martyr ; yet doth he feel a little of the same spirit within him, and
his small discoveries are to him an America. For to travel anywhere
intelligently is to discover for yourself, if not for any one else ; and
the undiscovered country lies not only in the heart of Africa, nor
round about the Poles.

(b) Time glides on ; fortune is inconstant ; tempers are soured ; bonds which seemed indissoluble are daily sundered by interest, by emulation, or by caprice. But no such cause can affect the silent converse which we hold with the highest of human intellects. That placid intercourse is disturbed by no jealousies or resentments. These are the old friends who are never seen with new faces, who are the same in wealth and in poverty, in glory and in obscurity. With the dead there is no rivalry. In the dead there is no change.

4. Give the substance of the following poem, bringing out what   20 you consider to be its main idea :—

> As a fond mother, when the day is o'er,
> Leads by the hand her little child to bed,
> Half willing, half reluctant to be led,
> And leave his broken playthings on the floor,
> Still gazing at them through the open door,
> Nor wholly reassured and comforted
> By promises of others in their stead,
> Which, though more splendid, may not please him more ;—
> So, Nature deals with us, and takes away
> Our playthings one by one, and by the hand
> Leads us to rest so gently, that we go,
> Scarce knowing if we wished to go or stay,
> Being too full of sleep to understand
> How far the unknown transcends the what we know.

5. (a) Name and explain the figures of speech used in any *four* of the following :—

> (i) He has a fluent tongue.
> (ii) All the world knows him.
> (iii) It was a weary journey.
> (iv) In the midst of life we are in death.
> (v) I am tired to death.

(b) Expand the following into similes ;—   4

> (i) Coming events casts their shadows before.
> (ii) Afghanistan is the Switzerland of Asia.

6. Scan the following lines, and name the metre in which they are   8 written :—

> See the wretch that long has tossed
>   On the thorny bed of pain,
> , At length repair his vigour lost
>   And breathe and walk again.

BENGALI COMPOSITION.

Paper-setters— {
HON. JUSTICE SIR ASUTOSH MUKHERJEE,
KT., C.S.I., M.A., D.L.
RAI SAHEB DINESCHANDRA SEN, B.A.
BABU KOKILESWAR BHATTACHARYYA, M.A.
}

Head Examiner—MAHAMAHOPADHYAYA DR. SATISCHANDRA
VIDYABHUSHAN, M.A., PH.D.

Examiners— {
BABU PANCHANAN GHOSHAL, M.A., B.L.
BABU SATISCHANDRA MITRA, M.A.
BABU NARENDRANATH BHATTACHARYYA, B.A.
BABU GIRINDRAKUMAR SEN, M.A.
BABU PARIMALKUMAR GHOSH.
BABU SAROJRANJAN BANERJEE, M.A.
BABU BHUBANMOHAN BANERJEE, M.A.
BABU SASANKAMOHAN SEN, B.A.
BABU GURUBANDHU BHATTACHARYYA, B.T.
BABU JAGADANANDA RAY.
BABU CHARUCHANDRA BASU.
BABU NAGENDRANATH BASU.
BABU HEMCHANDRA VIDYARATNA, KABYA-
TIRTHA.
BABU CHARUCHANDRA BANERJEE, B.A.
BABU ABINASCHANDRA DAS, M.A.
BABU NIKHILNATH RAY, M.A.
BABU RAJENDRANATH KANJILAL, B.L.
BABU JADUNATH MANDAL, B.L.
BABU NALINIKANTA BHATTASALI, M.A.
}

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into Bengali:—   20
    (*a*) One day when Viráta and four of the Pándavas were absent,
Duryodhana and his brothers made an expedition against Viráta's
capital and carried off some cattle. Uttara, the son of Viráta, deter-
mined to follow and attack the Kuru army, if any one could be found
to act as his charioteer. Vrihannalá undertook this office, and pro-
mised to bring back fine clothes and ornaments for Uttará and the
other women of the palace. When they arrived in sight of the Kuru
army, the courage of Uttara, who was a mere youth, failed him.
Vrihannalá then made him act as charioteer, while he himself under-
took to fight the Kauravas. Upon that terror seized Bhíshma,
Duryodhana and their followers.

(b) Babar was a soldier of great daring and strength. He tells   20
us in his autobiography that in his old age 'after his health had be-
gun to fail, he rode in two days a distance of 160 miles, and on the
same journey twice swam across the Ganges, as he had done with   .
every other river he had met with.'   His mind was full of vigour as
his body.   Besides attending to the business of his kindom, he looked
after agricultural improvements and public works.   He had to suffer
such hardships and privations as seldom fall to the lot of a prince,
and yet he bore them all with a patient and cheerful spirit.   He had
a very kind and affectionate heart which he retained up to the end
of his life.

(c) One day Gautoma saw in the street an old man bent with   20
age, and another day he saw a dead body. When he was told by his
servant that everybody, he himself and his lovely wife, would grow
old and die, it made him very sad. For hours he would sit and
think what was the reason that the world was full of sadness. After
a time he became discontented with his life of love and pleasure in
the palace When he was twenty-nine he left his home one night
when everybody was asleep and wandered into the forests to seek
the truth about life. First of all he went as a pupil to the *Rishis* or
with men who lived in caves in the forest. But he found that they
could teach him nothing. For some years he starved himself and
performed penances hoping that he would thus find peace of mind.   '

2.   Rewrite *any three* of the following passages, substituting a   6
single word for the underlined words in each :—

(a) যে ভূমির উৎপাদিকা শক্তি নাই তাহাতে সার দেও ।

(b) তাহার দুঃখ সকলেরই মর্ম্মস্থল স্পর্শ করে ।

(c) নৃপতি নরনারায়ণের সভাপণ্ডিত পুরুষোত্তম ব্যাকরণে ব্যুৎপন্ন
ছিলেন এবং তিনি ন্যায়ও ভাল জানিতেন ।

(d) ভয়ে আমার শরীর "পা হইতে মাথা পর্য্যন্ত" কাঁপিতে
লাগিল ।

3.   Rewrite the following, correcting all errors :—   8

(a) যাহা দোষনীয়, তাহাই পরিত্যজ্য ; কেননা ইহার কোন
উপকারীতা নাই ।   "

(b) বালকটী জলে আকণ্ঠ পর্য্যন্ত নিমগ্ন হইয়া গিয়াছে ; উহাকে
উত্তোলন করা আবশ্যকীয়, কিন্তু আমার উহা সাধ্যায়ত্ত নহে ।   ,

(c) ইতিহাস ইহা বারম্বার সপ্রমাণিত করিয়াছে যে ; যশেচ্ছা
প্রণোদিত হইয়া বৈদেশিকগণ, ধনধান্ত-শালিনী অত্র ভারত ভূমিতে
আগমণ ও যুদ্ধান্তর তাহারা এদেশের অধিবাসীগণের সঙ্গে ঐক্যতা
এবং সখ্যতার ঘনিষ্ঠ সূত্রে মিশিয়া গিয়াছিল ।

4.   Distinguish between :—   6

উপাদান and উপাধান । 'বলি and বলী । কোন and কোন্ । দ্যূত
and দূত । সুত and সূত । আশা and আসা ।

5. Write an essay on *any one* of the following subjects:—   **40**
    (*a*) Health and longevity.
    (*b*) Bengal under different seasons.
    (*c*) Raja Ram Mohan Roy.
    (*d*) Ishwar Chandra Vidyasagar.
    (*e*) A Mohamedan saint.

HINDI COMPOSITION.

Paper-setters—$\left\{\begin{array}{l}\text{Babu Somnath Jharkandi, M.A.}\\ \text{Babu Lala Sitaram, B.A.}\end{array}\right.$

Examiner—Babu Puranchand Nahar. M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate the following passages into Hindi:—
    (*a*) Every one can make the very best of his opportunities. He   20
    may believe that life is not so full of happiness that he cares to pro-
    long it, but he should remember this: that while he lives he will
    enjoy more happiness and confer much more happiness on others if
    he is well and cheerful and in possession of all his faculties unim-
    paired. There was once a time when it was considered commen-
    dable to be sick; it indicated delicacy and called forth the active
    sympathies of friends to the extent that the invalid was quite a
    sovereign in the household. But we know to-day that there is noth-
    ing honourable in being sick. Indeed, it is something to be ashamed
    of. For willingly or unwillingly some of nature's laws have been
    broken, and one is paying the penalty. We have no right to inflict
    ourselves weak, helpless, and despondent upon our fellow-beings if
    we can possibly avoid it.
    (*b*) Loyalty is not a thing that is owed. It is a thing that grows   20
    or does not grow. When people have been comrades and worked
    together for a long time even with quarrels, there rises normally among
    decent human beings a bond of trust, a mutual expectation. Now
    I believe that between England and India that bond exists. We
    have had a long experience together, and mostly we have not failed
    one another. In your times of need, in plague or famine, you confi-
    dently expect us to help, and you find even our haughtiest officials
    working their fingers to the bone to help your people. In our times
    of need, well, you have not often had the full chance of showing
    what you could do. It is one of your grievances, and one with which
    I warmly sympathize. But now when we are threatened to the very
    life you have helped. You have given us more than we ever dared
    expect. The message of the Indian kings and princes which Mr.
    Roberts read out in the House of Commons will not easily be for-
    gotten. We shall, I believe, win this war. India will share our
    glory.

2. Write an essay on *any one* of the following subjects:—   **40**
    (*a*) Influence of exercise on health—insufficient exercise—over-
    exertion—the varous kinds of exercise.

(b) Life in an Indian village—principal occupations of the inhabitants—the influence of the zemindar and the chowkidar.

(c) The character of Sita as described in the Ramayana.

3.   Rewrite the following correctly :—   20

फिर श्रौचक और चेला में ऐसा ही संबंध होनी चाहिये गुरु
अपना चेला को कितना परिश्रम से सब प्रकार का तकलीफ सह
कर शिघाता है । गुरु जल करता है कि उस का चेला बुधिमान हो
जावे, अच्छी चाल चलन का बन जाय । हम देखे कि बहुत सा
लड़का लोग अपना गुरु की आदर नहीं करता । यह बड़ा अनुचित
बात है । श्रौचक की उपकार न मानना कृतघनता की पाप है ।

URDU COMPOSITION.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into Urdu *any two* of the following passages :—

(a) There are many tests by which a gentleman may be known :   20
but there is one which never fails.   How does he exercise power over
those subordinate to him ?   How does he conduct himself towards
women and children ?   How does the officer treat his men, the em-
ployer his servants, the master his pupils, and a man in any other sta-
tion those who are weaker than himself ?   The discretion, forbear-
ance, and kindness with which power in such cases is used may indeed
be regarded as the crucial test of gentlemanly character.   When La
Motte was one day passing through a crowd, he accidentally trod
upon the foot of a young fellow, who forthwith struck him on the
face.   ' Ah, sire,' said La Motte, ' you will surely be sorry for what
you have done when you know that I am blind.'

He who tyrannizes over the weak and helpless may be a coward,
but no true man.   Strength, with the consciousness of strength, in
a right-hearted man, imparts a nobleness to his character ; but he
will be most careful how he uses it.

(b) We have seen that there was a time, long before the begin-   20
ning of recorded history, when the forefathers of the various Aryans
dwelt together as one people, speaking one language.   And the ad-
vances which they had made towards civilization show that they
must have dwelt together for a long time, but a time whose length
we cannot undertake to measure.   Nor can we undertake to fix a

date for the time of the great separation, when the families which had hitherto dwelt together parted off in different directions and became different nations, speaking tongues which are easily seen to be near akin to each other, but which gradually parted from one another, so that different nations could no longer understand each other's speech. All that we can say is, that these are facts which happened long before the beginnings of written history, but which are none the less certain because we learn them from another kind of proof. The various wandering bands must have parted off at long intervals one by one; and it often happened that a band split off into two or more bands in the course of its wanderings.

(c) When the dervish saw that the prince's mind was made up, he drew a ball from a bag that lay near him, and held it out. 'If it must be so,' he said, with a sigh, 'take this, and when you have mounted your horse throw the ball in front of you. It will roll on till it reaches the foot of a mountain, and when it stops you will stop also. You will then throw the bridle on your horse's neck without any fear of his straying, and will dismount. On each side you will see vast heaps of big black stones, and will hear a multitude of insulting voices, but pay no heed to them, and above all, beware of ever turning your head. If you do, you will instantly become a black stone like the rest. For those stones are in reality men like yourself, who had been on the same quest, and have failed, as I fear that you will fail also. If you manage to avoid this pitfall, and to reach the top of the mountain, you will find there the talking bird in a splendid cage, and you can ask him where you are to seek the singing tree and the golden water.' 20

2. (a) Give the root (مادہ) of *each* of the following words:— 2

انکسار ۔ استفسار ۔ انتشار ۔ تقصیر ۔ ترجیح

(b) Form derivatives from *any five* of the undermentioned roots, and illustrate their uses in sentences:— 10

نقل ۔ فکر ۔ شرح ۔ قسمت ۔ عقل ۔ نفس ۔ علم

3. Give four idiomatic uses of *each* of the following words and use them in sentences:— 8

پانی ۔ خاک ۔ انکھ ۔ جان *

4. Write an essay in Urdu on *one* of the following subjects:— 40
   (a) Indian Railways:—Introduction—advantages, disadvantages—their influence upon the country.
   (b) Famine:—Causes—effects—preventive measures—relief works—whether beneficial in any way—concrete illustrations.
   (c) Knowledge is Power.
   (d) The Beauties of Nature.

ORIYA COMPOSITION.

Paper-setters— { BABU MADHUSUDAN DAS, B.A.
{ BABU BRAJANANDAN DAS, M.A.

*Examiner—*BABU DASARATHI PANIGRAHI, B.A., B.T.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into Oriya :—

(a) Napoleon Buonaparte was of opinion that ' the future good or 20 bad conduct of a child depends entirely on the mother.' Once in the course of a conversation with Madame Campan on the subject of public education, he remarked, ' The old systems of instruction seem to be worthless. What, do you think, is yet wanting for the better instruction of the people ?'—' Mother ',—immediately replied Madame Campan. Her reply struck the emperor. ' Yes !' he said, ' here you have a system in a word—mothers trained to properly instruct their children '

Napoleon himself was accustomed to attribute the training of his character to his mother. She was a woman distinguished for her strength of purpose and vigorous understanding.

(b) Being able to swim, I swam until night, when my arms and 20 shoulders were tired, and, in this perilous situation, I gave myself up as lost; but the sea rose with the violence of the wind, and a wave like a vast castle 'threw me upon the land. I ascended the shore, and after I had wrung out my clothes and spread them upon the ground to dry, I slept: and in the morning I put on my clothes again, and, looking to see which way I should go, I found a tract covered with trees, round which I lost no time in walking.

(c) Then Apollyon, espying his opportunity, began to gather up 20 close to Christain, and, wrestling with him, gave him a dreadful fall. And with that Christian's sword fell out of his hand. Then said Apollyon, ' I am sure of thee now,' and with that he had almost pressed him to death, so that Christian began to despair of life. But as God would have it, while Apollyon was fetching his last blow, thereby to make a foul end of this good man, Christian nimbly reached out his hand for his sword, and cried out, saying, ' Rejoice not against me, oh mine enemy ! When I fall, I shall arise !' and, with that, gave him a deadly thrust which made him give back as one that had received his mortal wound.

2. Rewrite the following sentences by substituting one word for 10 each set of words underlined therein. The new words must be equivalent both in meaning and structure to the words they replace :—

(a) ଯେଉଁ ବ୍ୟକ୍ତି ଅଧିକ ନଦ୍ରା ଯାଏ ଏବଂ ଯେ ସୁଖ୍କରେ ଅଳସୁଆ ଭାବର ପ୍ରାର୍ଥନା ସବୁପ୍ରକାରେ ଅର୍ଥକୁ ଅନୁକ୍ରମ କରୁ ନ ଥିଲେ ସେ ଶାଢ୍ୟ ହୁଏ ନାହିଁ ।

(b) ଗେରୁମାଟି ମିଶିଥିବା ଜଳରେ ସ୍ନାନ କରିବା ବ୍ୟକ୍ତିର ବସ୍ତ୍ର ମଳୀନ ହୋଇ ଯାଏ ।

(c) ଯେଉଁ ବ୍ୟକ୍ତିର ଅଧ୍ୟନ୍ ପ୍ରଢ଼ା ଅଛ ସେ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ଅଧିକ ପୂଜାର ଯୋଗ୍ୟ ହୁଏ ।

(d) ସାଗର କୂଳର ସମୀପସ୍ଥ ପ୍ରଦେଶରେ ଦଣ୍ଡାୟମାନ ହୋଇ ଆମେ ସମୁଦ୍ର ପର୍ଯ୍ୟନ୍ତ ବ୍ୟସ୍ତ ଧରଣୀର ଈଶ୍ଵରଙ୍କ ଅଭ୍ୟର୍ଥନା କରି ଥିଲୁଁ ।

Either,

3. Change into simple sentences the following complex and com- 10
pound ones :—

(a) ଯେତେବେଳେ ଭାରତରେ ହିନ୍ଦୁ ରାଜାମାନେ ଦୁର୍ବଳ ହୋଇ ଥିଲେ ଏବଂ ସେମାନଙ୍କ ମଧ୍ୟରେ ଏକତା ନ ଥିଲା ତେତେବେଳେ ଯେଉଁ ପାରସ୍ୟ ସୁଦୂର ଅବସ୍ଥିତ ଏବଂ ଯାହାର ଲୋକେ ଯୁଦ୍ଧପ୍ରିୟ ଓ ମୁସଲମାନ ଧର୍ମାବଲମ୍ବୀ ସେହିମାନେ ଏଦେଶ ଅଧିକାର କରି ନେବାକୁ କୃତସଙ୍କଳ୍ପ ହେଲେ ।

(b) ଯେ ରାଜମୁକୁଟ ଧାରଣ କରନ୍ତି ଏବଂ ଯେ ରାଜକାର୍ଯ୍ୟ କରନ୍ତି ତାହାରେ ସେମାନଙ୍କର ଯେତେ ପ୍ରଭୁପତ୍ତି ଓ ସମ୍ମାନ ଥାଉ ପଛେକେ, ମନ ସର୍ବଦା ଚିନ୍ତାରେ ଆକୁଳ ଥାଏ ।

(c) ସମୁଦ୍ର ଗର୍ଜ୍ଜିବାର ଶୁଣା ଅଛ, ମେଘ ଉଠାଉ ଅଛ ଏବଂ ହିପିହିପି ବର୍ଷା ହେଉ ଅଛ ଦେଖ଼ ଅଛ, ଏଥରେ ପୁଣି ଭଣ୍ଡ ଛତା ନ ଦେଲ ବାହ଼ା ଅଛ ; ଏହା ପ୍ରବଚେତନାର କାର୍ଯ୍ୟ କୁହେ କ ?

(d) ବୈଶାଖ ମାସ ହୋଇ ଥିଲା, ରାତ୍ରେ ବଡ଼ ପଢ ଥିଲା, କାଥା ସୁଲୁସୁଲୁ ବହୁ ଥିଲା, ଆମେ ଦୁହେଁ ପିଣ୍ଡା ଉପରେ ବସି ଥିଲୁଁ, ମୁହଁକୁ ମୁହଁ ଲଗାଇ କଥାବାର୍ତ୍ତା କରୁ ଥିଲୁଁ ।

Or,

Correct all the errors in the following paragraph, and rewrite the 10
same with proper punctuation :—

ଯେଉଁ ନାରୀର ହୃଦୟ ମନ୍ଦିରେ ପଞ୍ଚରୂପ ଶିବ ବସୁଦ୍ଧ ପ୍ରିୟତମନ ଭମିଷ୍ଠ ଭକ୍ତିୟଦ୍ୱାର ସଦା ସର୍ବଦା ପୁଜିତ ସେହି ନାରୀର ହୃଦୟମାନେ ଶିବାଲୟ ତୁଲ୍ୟ ସୌରଭ ବରଣ କରୁ ଥାନ୍ତି ଯେଉଁ ନାରୀ ସ୍ଵଭାବତ'

ପଦୁନ୍ନ ପଦ୍ନ୍ଗଣ। ଲକ୍ଷ୍ମୀ। ସ୍ତ୍ର ସାହ୍ୟାସ ପ୍ରଭୃଢ ଅନ୍ୟାନ୍ୟ ସଦ୍‌ଗୁଣ‌ଗ୍ରଣୀ ଏହି ଭକ୍ତିଯୋଗିରୟ ଦ୍ଵାର ଆକର୍ଷିତ ହୋଇ ପୁଣ୍ୟ ମନ୍ଦିରର ଚତୁଷ୍ପାର୍ଶ୍ଵ ଅଖଣ୍ଡ ଶୟୁଣ କରି ପହରର ତୁଲ୍ୟ ରହି ଥାନ୍ତି ଉପସ୍ଥିତା। ପଦୁନ୍ନ ପୂର୍ବଳ୍କୁ ସଢକୁଳର ଉପଯୁକ୍ତ ଭର୍ତନ ଥିଲେ ।

4. Write an essay on *one* of the following subjects :—   40
    (*a*) Habits.
    (*b*) Comparative advantages of town and country life.
    (*c*) Our women and their needs.
    (*d*) Description of a holiday trip.
    (*e*) ' A rolling stone gathers no moss.'

ASSAMESE COMPOSITION.

Paper-setters— { SRIJUT ⸌ HEMCHANDRA GOSWAMI, B.A.
                 .,   NOBINCHANDRA BARDOLAI, B.A.

*Examiner—*SRIJUT SATYANATH BORA, B.L.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into Assamese *any two* of the following passages :—   40
    (*a*) Is novel reading a sheer waste of time ? And we have to
answer the question in the affirmative, if the reading has in view the
mere passing of time. The well-known proverb runs, ' Art is long
and time is short,' but we often seem hardly to realize the briefness
of our existence To a poor man, however, the shortness of time
is made manifest by the fact that he has to work from morn to mid-
night to support himself and his family. To the hard-working stu-
dent before his Examination, time seems too short, and when his
earthly career is about to close, the old man moans for the shortness
of his life. To the idle rich and the lazy young man, however, time
has no value, and they have to invent devices ' to kill time ', and
novel reading is one of these.
    (*b*) Then Gordon went to Egypt. The ruler of that country asked
him to come, and offered him £10,000 a year. But he would not take
more than £2,000. He said he wanted to show the ruler that gold
and silver were not worshipped by all the world, and that he did
not want money which was ground out of the poor. He tried very
hard to put down the slave trade ; but the ruler had not given
him enough power, and Gordon refused to stay unless he was able
to do what he thought right. So he was made Governor General of
a great part of the country ; and he took prisoner the great slave
dealer, who sold poor black people, and put him to death.
    (*c*) The men of Sparta knew what great danger they stood in,
being so few against so mighty a host. But while they waited for

the fight, they took part in sports and games, or combed their long
hair, as they always did for great festivals. The Persian king sent a
spy, who told him what the Greeks were doing. He was much sur-
prised, and could hardly believe their news.

He had a throne built for himself, and on the fifth day he sat on
it, and watched his army go forward to the attack. Bravely the
soldiers went against the Greeks, and soon were fighting hand to
hand.

2. Expand the following idea in simple Assamese :—   8

(a) মনুষ্য মৰণশীল। কিন্তু কে জনমানে মৰনক জয় কৰি
অমৰত্ব লাভ কৰিছে। মৃত্যুৰ সংহাৰিণী শক্তিয়ে তেওঁলোকক পৃথিৱীৰ
পৰা নিৰ্মূল কৰিব পৰা নাই।

3. Explain the following Assamese words and phrases :—   5

কাণ-সমনীয়া, আধানাৰ্জি, আচল্লাই, কোণালগা, সাউদ।

4. Render the following passage into modern Assamese :—   5

পূৰ্ব্বতে যশোদানন্দন কৃষ্ণত ব্ৰজবাসীৰ যেমন স্নেহ আছিল
এৱে অপুনাৰ পুত্ৰতো এক বৎসৰ পৰ্য্যন্ত তেমন স্নেহ বাঢ়িল।
ভগৱন্তে এমনে সৰ্ব্বৰূপ হয়। নানা ক্ৰীড়া কৰি বৎসৰ গঞ্জাইল।

5. Illustrate the use of the following words :—   2

অমিয়া, প্ৰবাহ।

6. Write an essay on *any one* of the following subjects :—   40

(a) তোমাৰ নিজ গাওঁথন বৰ্ণনা কৰা।

(b) বাতৰি কাকতৰ উপকাৰিতা।

(c) বিপদত ধৈৰ্য্য।

(d) প্ৰকৃত ভদ্ৰলোক কোন ?

(e) অসমীয়া সাহিত্যৰ বৰ্ত্তমান অৱস্থা।

KHASI COMPOSITION.

Paper-setter—ROY ROWLAND THOMAS, ESQ., M.A.

Examiners— { ROY ROWLAND THOMAS, ESQ., M A.
            { REV. J. C. EVANS.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Write an essay in Khasi on ' Good Manners ' Headings : the   40
meaning of ' good manners '—their diversity in different countries—
they presuppose self-control—they are the peacemakers of mankind—
they need not necessarily express goodness of heart—their relation to
the ordinary conception of a gentleman.

2. Write a short story in Khasi illustrating the saying ' honesty   10
is the best policy '.

3. Compose sentences in Knasi, using the following expressions :—   10
bak jingbak ; krib-krib ; ka bok, ka rwtang ; thud thud ; thap-dap.

4. Translate the following into Khasi :—   15

(*a*) In literature the history of the Vikramadityan age opens with
the brilliant name of Kalidasa. His creations of fancy seem to live
and move among us ; his matchless melody of verse never ceases
to please ; and his inexhaustible and apt similes are as natural and
as profuse as the wild flowers of an Indian jungle, and quite as sur-
prising and sweet.

(*b*) Then Minerva dropped her staff and cried, ' Lo ! she is come ! '
and she took on her true shape and showed herself in all her god-like
splendour. The bystanders fell upon the ground and worshipped her.
But Arachne, foolish Arachne, held her head high, and did not show
the least fear or awe ; on the contrary, she again asked Minerva to
enter into a trial of skill.

Without more words, the goddess and the humble girl took their
stand, each before an empty loom, and began to work in silence.
The group in the back of the room watched, breathless with wonder
and awe.

In the centre of Minerva's loom there soon appeared figures telling
the story of a famous contest in which the gods had taken part ; and
into each of the four corners she wove a picture of the fate that had
overtaken daring mortals who had opposed the gods. These were
meant as a warning to Arachne.

BURMESE COMPOSITION.

Paper-setters— { MR. MAUNG WE LIN.
MR. MAUNG TIN, M.A.

*Examiner—*MAUNG BA MAW, B.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate any *two* of the following into Burmese :—

(*a*) Canute's celebrated reproof of his courtiers exhibits high   20
moral elevation. Some of his flatterers, breaking out one day in ad-
miration of his grandeur, exclaimed that everything was possible for
him ; upon which the monarch, it is said, ordered his chair to be set
on the sea-shore when the tide was rising, and as the waters ap-
proached he commanded them to retire and to obey the voice of him
who was lord of the ocean. He feigned to sit some time in expecta-
tion of their submission, but when the sea still advanced towards
him and began to wash him with its billows, he turned to his courtiers
and remarked to them that every creature in the universe was feeble
and impotent, and that power resided with one Being alone, in whose
hands were all the elements of nature, who could say to ocean—' Thus
far shalt thou go and no farther.'

(*b*) It does not matter very much where Christmas is kept, so   20
long as the family can get together, and all hearts be filled with His
love, who came as a babe in Bethlehem to bring blessings to the
world. Under such circumstances Christmas is a joyous time every-
where, and dear friends, meeting together for a few days of social
intercourse, may well bless the season, and retain their old love for
it. It is interesting to think of the various scenes into which the
grey head and kindly face of old Father Christmas are brought with
shouts of welcome. He comes to the place where flowers and per-
fumes give him a taste for summer's months of gladness, and where
men who occupy elevated positions are glad to rest them in his genial
smile.

(*c*) You love many things because you are accustomed to them,   20
and are pained by many things because they are strange to you ; but
that does not make the accustomed sight more beautiful, or the
strange one less so. The well-known object may be dearer to you, or
you may have discovered charms in it which others cannot ; but the
charm was there before you discovered it, only needing time and love
to perceive it. You love your friends and relations more than all the
world beside, and may perceive beauties in their faces which others
cannot perceive ; but you feel you will be ridiculous in allowing your-
self to think them the most beautiful persons in the world ; you ac-
knowledge that the real beauty of the countenance depends on fixed
laws of form and expression, and not on the affection you bear to it,
or to the degree in which you are familiarized with it ; and so does
the beauty of all other existences.

2. Turn into plain Burmese prose—   20

(*a*) ပဒ္ဓမရှေးခါ၊ ထိုသတ္တဝါ ဆည်း 'ငါ့တို့အမျိုး၊ ဆိုး
လည်းမမြှဲ၊ ဘေးလည်းမသိ၊ �’ဘိလည်းမတော်။

11

(b) ကြ�ားသူလည်းမခံသာ၊ နာသူလည်းကျိုးမရှိ၊ သိသူ လည်း ဂုဏ်မထင်၊ ခံရသူအရှင်လည်း၊ သဲကျင်နာရှိမ တတ်॥

(c) ရဲဘော်သားတို့နှင့်၊ ပြားလိုပြား၊ လုံးလိုလုံး၊ ထုံး လိုပင်ချေလိုချေ၊ အတွေ့တွေ့အရာရာ॥ နာနာဘာဝ၊ ဝိနာ ဘာဝ၊ စွမ်းနိုင်လွှသောၤကြံခဲ့॥

(d) မဟာသိန္ဓေ ၌၊ ရွှေဘုံထိပ်ဖျားက॥ သိကြားမင်းမြ တ်နိုး၍၊ ရွှေအိုးကြီးသုံးဂါပုတ်၊ လက်ဆုပ်ကိုယံကြည်၊ အိမ်တွင်းသို့လာပြီးလျှင်း ဟူပါတော့အပ်သကဲ့သို့॥

(e) အချောအနု၊ မပုမမြင့်၊ အခန့်သင့်ကလေး၊ လေး သေးသွယ်သွယ်၊ မငယ်လွန်း မကြီးလွန်း၊ ဇွန်းခြစ်တမျိုး၊ အထိုးခံအုန်းသီး၊ ဘုန်းကြီးကြိုက် မင်းကြိုက်၊ ကာလ သားများနှင့်လံားလားမျှမထိုက်॥

3.   Write an essay on any *one* of the following subjects:—   **40**

    (*a*) Study of good books exerts intellectual and moral influence upon the mind, and elevates character.

    (*b*) Bodily health—θrelation between mind and body—benefit of walking and other forms of exercise—self-control important to health —alternate rest and work.

    (*c*) Prevention is better than cure.

ENGLISH.

ALTERNATIVE PAPER.

Paper-setters— { RAI LALITMOHAN CHATTERJEE, BAHADUR, M.A.
T. S. STERLING, ESQ., M.A.

*Examiner—*REV. J. DRAKE, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Write an essay on *one* of the following subjects :—   40
    (*a*) Home Industries for Indians.
    (*b*) Self-reliance.
    (*c*) My first term at College.
    (*d*) Peace hath her victories.

2. Paraphrase the following passage :—   20
Experienced men of the world know very well that it is best to pay as they go along, and that a man often pays dear for a small frugality. The borrower runs in his own debt. Has a man gained anything who has received a hundred favours and rendered none ? Has he gained by borrowing, through indolence or cunning, his neighbour's wares, or horses, or money ? There arises on the deed the instant acknowledgment of benefit on the one part, and of debt on the other; that is, of superiority and inferiority. The transaction remains in the memory of himself and his neighbour; and every new transaction alters, according to its nature, their relation to each other. He may soon come to see that he had better have broken his own bones than to have ridden in his neighbour's coach, and that 'the highest price he can pay for a thing is to ask for it.'

3. Give in your own words the *substance* of the following passage :—   20
'Oh, World God, give me Beauty !' cried the Greek.
His prayer was granted. All the earth became
Plastic and vocal to his sense ; each peak,
Each grove, each stream, quick with Promethean flame,
Peopled the world with imaged grace and light.
The lyre was his, and his the breathing might
Of the immortal marble, his the play
Of diamond-pointed thought and golden tongue.
Go seek the sunshine race, ye find to-day
A broken column and a lute unstrung.
'Oh, World God, give me Power !' the Roman cried.
His prayer was granted. The vast world was chained
A captive to the chariot of his pride.
The blood of myriad provinces was drained
To feed that fierce, insatiable red heart.
Invulnerably bulwarked every part
With serried legions and with close-meshed Code.
Within, the burrowing worm had gnawed its home.
A roofless ruin stands where once abode
The imperial race of everlasting Rome.

4. Explain and illustrate what is meant by rhythm.   12

Condense the following extract into a metaphor:—

> As slow our ship her foamy track
> Against the wind was cleaving,
> Her trembling pennant still looked back
> To the dear isle it was leaving.
> So loth we part from all we love,
> From all the links that bind us;
> So turn our hearts as on we rove,
> To those we have left behind us.

5. Write a brief appreciation of the following lines about the night- 8
ingale's song:—

> The voice I hear this passsing night was heard
>   In ancient days by emperor and clown:
> Perhaps the self-same song that found a path
>   Through the sad heart of Ruth, when, sick for home,
>   She stood in tears amid the alien corn;
>   The same that ofttimes hath
> Charmed magic casements, opening on the foam
>   Of perilous seas, in faery lands forlorn.

SANSKRIT.

Paper-setters—
{ HON. JUSTICE SIR ASUTOSH MUKHERJEE, KT., C.S.I., M.A., D.L.
MAHAMAHOPADHYAYA DR. SATISCHANDRA VIDYABHUSHAN, M.A., PH.D.
BABU MURALIDHAR BANERJEE, M.A.
BABU HARICHARAN GANGULI, M.A. }

Head Examiner—BABU MURALIDHAR BANERJEE, M.A.

FIRST PAPER.

Examiners—
{ BABU KALIKRISHNA GOSWAMI, M.A.
BABU DEBENDRANATH RAY, M.A
BABU KUMUDBANDHAB CHATTERJEE, M.A.
BABU HARICHARAN GANGULI, M.A.
BABU SRISCHANDRA CHAKRABARTI, B.A.
PANDIT RAJENDRANATH VIDYABHUSHAN.
BABU KALIKRISHNA BHATTACHARYYA.
MAHAMAHOPADHYAYA PRAMATHANATH TARKA-BHUSHAN.

To look over answer-papers written in Devanagri character.

DR. PRABHU DUTT SASTRI, M.A., PH.D.

To look over answer-papers written in Uriya character.

BABU KASINATH DAS, M.A. }

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Give in English the substance of the description of *either* the 8
Himālayas in Kumāra Sambhava, *or* autumn in Bhaṭṭikāvya.
2. Explain in English the allusion in— 6

Either,

(a) प्रसूत वा नागवधूपभोग्यं मेनाकमस्मोनिधिवद्वक्ष्यम् ।
क्षुब्धेऽपि पतच्छिद्रि तृनभ्रत्रावेदनाचं कुलिग्नलतानाम् ॥

Or,

(b) वैयामिभ्रूतञ्च युवासवोर्ढ मग्रञ्च शोर्मिर्भुवनञ्च भांरम् ।
इवौंषि संग्रथ्यपि रक्तं तो तपोधमैरित्यभभाधिघातान् ॥

3. Translate into English *any* of the following groups :—   12

A.

(*a*) पवब्रदिक्कु पांशुविचिक्कवातं शङ्क्ष्वनान्तरपृष्ठवृष्टि ।
    श्रीरिणां ख्यावरजङ्गमानां सुखाय तज्जन्मदिनं बभूव ॥

(*b*) दत्तावधानं मधुलेहिगीतौ प्रशान्तचेष्टं हरिणं जिघांसुः ।
    आकर्णयन्नृलुकधंसनादान् लच्छे समाधिं न दधे मृगावित् ॥

B.

(*a*) जगल्ब्रोनिरयोनिस्त्वं जगइन्तो निरन्तकः ।
    जगशदिरनादिस्त्वं जगत्रीशं निरीश्वरः ॥

(*b*) स पुण्यकोर्तिः शतमन्युकल्पो मद्रेन्द्रलोकप्रतिमां सब्रह्मगा ।
    अध्यास्त सर्वेन्तुसुखामयाध्यामध्यासितो ब्रह्मभिरिह्रुबोधैः ॥

4. Give in English the substance of the verses in *one* of the follow-   14
ing groups :—

A.

(*a*) प्रावर्ज्जितजटामौलिविलम्बिशशिकोटयः ।
    रुद्राणामर्पि मुह्रनिः सतहुङ्गश्रिसनः ॥

(*b*) अन्तर्निविष्टोज्ज्वलरत्नभासोगवाचजालैरभिनिम्नतग्यः ।
    हिमाद्रिटङ्कादिव भान्ति यस्यां गङ्गाम्बुपातप्रतिमा गृहेभ्यः ॥

B.

(*a*) अभ्युन्नताङ्कुड्नखप्रभाभिर्निर्चं पणाध्रागमिवोद्गिरन्तो ।
    आजह्रतुस्तचरणौ पृथिव्यां ख्यलारविन्दश्रियमव्यवस्थासू ॥

(*b*) अथ पुरुजवयोगाद्रेयवु दूरसंख्यं
    रवयदन्तिरयेव ग्रामसुर्वोंविभार्षसु ।
    क्रमरहितमचेतच नौरज्जौकारितदमां
    बलमुपहितशोभां पूर्णमायादयोध्यासु ॥

5. (*a*) Expound *samāsas* in *any two* of the words underlined in   4
Questions 3 and 4.

(*b*) In how many different ways can you expound the *samāsa* in   2
षबादिः in Question 3 B (*a*) ?

(c) Account for the case-endings in *any two* of the following, viz.   2
सुखाय in Question 3 A (a), ब्रह्म in Question 3 A (b), वयोभ्यामु in Question 3 B (b), and र्येण in Question 4 B (b).

(d) Parse विषट्च्च: in विषट्च्चोऽपि संवर्द्धं स्वयं च नृमसाम्युतम् .   2

(e) Derive *any four* of the following words :—

विपत्क्रिम:, सृगाविद्, ब्रालिङ्गीन:, श्रोवस्त्विका:, अध्वनीन:, दव-
यत्, and वेवयज्ञीन .

(f) Conjugate *any four* of the following roots:—चद् in चुट 3rd   4
person singular, पच् in लड़ 2nd person singular, नन् in 1st person singular, भा in विधिलिङ्ग 3rd person singular, and वद् in लिट् 2nd person singular.

6. (a) How does Mallinātha defend the forms राविन्दिव in व्यत्र   4
विन्दिवस्य ते *or* भरौराद्वरा in प्रेम भरौराद्वरां चरस्य ?

• (b) Translate into English the following passage from Mallinā-   6
tha's commentary :—

> पिता न च्चायते यस्या भ्राता यदि न विद्यते ।
>
> नोपयच्छेत् तु तां कन्यां धर्म्मलोपभयात् सुधौः ॥
>
> इति अभ्रातृक्रकन्यापरिरत्रयनिषेधात् प्रकृते पार्वतो
>
> भ्रातृमतौ एवेति सूचनार्थं मेनाक्रवर्णनमिति तात्पय्यार्थः ॥

7. Comment upon grammatical peculiarity in *one* of the follow-   3
ing :—

(a) त्रियम्बकं संयमिनं ददर्श ।

(b) गुणाः पूजास्थानं गुणिषु न च लिङ्गं न च वयः ।

8. Correct *any two* of the following :—

(a) सरस्वत्यं नमस्कृत्य पठेत् शास्त्रमुत्तमम् ।

(b) विजित्वा निखिलान् अन्नद् विरेमे रावणस्तदा ।

(c) सीता पद्मपलाशता रामेण सह मोदति ।

(d) ददमे शङ्कुं महावीर: काश्रीराजो महन्भुजः ।

9. Translate into Sanskrit *any five* of the extracts below :—   25

(a) Devadatta has recently performed his son's Upanayana cere-
mony. He gave much Dākshina to Brāhmans on that occasion.

(b) From his sitting constantly at home, and not doing anything,
have resulted poverty and many painful diseases.

(c) A very violent storm arose. The sun was invisible, and it
appeared as if the wind was going to tear up all trees by the roots.

(d) Viśvāmitra practised austerities for a long time, and at last
attained Brāhmanhood through his perseverance.

(e) A Brâhman is he who is ever forgiving, and loves and lives for all.

(f) He went to Benares to bathe in the holy waters of the Ganges, and stayed there two years studying philosophy.

(g) There is a man waiting at the door who wants to speak you on matters of great importance.

SANSKRIT.

Second Paper.

Examiners—

⎧ Babu Abinaschandra Guha, M A.
| Babu Nilmani Chakrabarti, M.A.
| Babu Lakshminarayan Chattopadhyaya, M.A.
| Babu Nalinimohan Mukherjee, M.A.
| Babu Upendranath Ray, Vidyabhushan, B.A.
| Babu Bishnupada Bhattacharyya, M.A.
| Babu Akshaykumar Datta Gupta, M.A.
| Babu Surendranath Das Gupta, M.A.

To look over answer-papers written in Devnagari character.

Dr. Prabhudutt Sastri, M.A., Ph.D.

To look over answer-papers written in Uriya character.

⎩ Babu Kasinath Das, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *any two* of the following extracts :—   14

(a) स तं दृष्ट्वा विस्मितो भूत्वा, प्राञ्जलिः प्रणतो वृतः सर्वमुं-
निगणैस्तत्रासनं कर्त्तुं यामास । परमासने समासीनञ्च तं परिपूज्य,
सेनानुव्रातः प्रीयमाणस्तत्रासनाभ्याशे निषसाद । स महातेजाः
परमेष्ठिनं ब्रह्माणमुवाच,—भगवन् ! कृतं मया परमपूजितं काव्यम् ।
ब्रह्मन् ! स्थापितं मयात्र वेदरहस्यम्, साङ्गोपाङ्गोपनिषदं वेदानां
विस्तरक्रिया कथिताः, इतिहासपुराणानामुन्मेषनञ्च कृतम् ॥

(b) स हि विद्वान् विग्रहंभक्तां दृष्ट्वा क्षुधार्त्तां श्रान्तां रक्षानां तर्पक्खिनीं वेपमानां त्वगस्थिभूतां भार्य्यामुवाच,—ग्रयि शोभने ! मृगाणामपि कीटपतङ्गानामपि स्त्रियो रक्ष्याश्च पोष्याश्च। नैवं वक्तुम- र्हसि। पत्त्रा नरो रक्षितः पुष्टश्च भवति। धर्मकामार्थाः शुश्रूषा कुलसन्ततिः पितृणामात्मनश्च धर्मः सर्वमेव दारेष्वधीनम्। यः पुमान् भार्य्यारक्षणे क्षमः, स सद्गयशः प्राप्नोति नरकांश्च गच्छति॥

(c) ग्रयाह्नेरात्रे निद्रानिलीढृनेत्रे परिजने विजने ग्रोकपारावार- मपारमुत्तर्सुमग्नक्षुवतौ सेनानिवेशवेश्म निःश्ब्दलेश्यं ग्रनेरतिक्रम्य, यस्मिन् रथस्य सस्कतया तदानयनपलायनप्रान्ता गन्तुमसमाः चमा- पतिरच्याः, पथ्याकुलाः पूर्वसमिप्तिन्, तस्य निकटवटतरोः ग्राखायां क्षविट्टुत्तरीयाह्ले बन्धनं सृतिसाधनं विरचय्य, मर्तुंकामाभिरासा वाङ्माधुरीविरसीकृतकलकण्ठा साश्रुकण्ठा व्यलपत्॥

2. Give an outline in English of the story of राजहंस.   8

3. Expound the *samāsas* in *any two* of the following:—   4

    (a) तत्राख्यानवरिष्ठं।

    (b) स्वसेनिकाञ्चुप्त्सान्तरायें।

    (c) ष्टेतितलिच्छतिप्रान्ताः।

4. Give the substance in English of *any two* of the following ex-   4
tracts:—

    (a) पर्जन्य इव भूतानृमयमत्त्रयोभारतद्रुसः 'सर्वेषां क्विसुच्या-नामुपजीव्यो भविष्यति।

    (b) राजा निखिल-तट-चुम्बित-निजवरणाम्बुजैः प्रशंसितपैवमां- ष्टात्मेररसायेरभाणि।

    (c) कञ्जन कालं विरचितरेवषमाधिर्गतार्धिक्ष्पुतु तावत्।

5. Translate *any two* of the following extracts into English:—   30

    (a) कस्यचिद्व राच्ञो नित्यं वानरोतिभक्तिपरोऽङ्गसेवको उन्तः- पुरेऽप्यप्रतिषिद्धप्रसरोऽतिविश्वासच्यानमधूत्। एकदा राच्ञो निद्रां गतस्य वानरो व्यजनं नील्वा वायुं विदधाति। राच्ञो वच्चस्खलोपरि मच्चिका उपविष्टा। व्यजनेन मुहुर्मुहुर्निषिद्धमानापि पुनः पुनस्तत्रैवो-पविशति। ततस्तेन स्वभावचपलेन मूर्खेण वानरेण क्रुठेन इता तीव्रं

खड्गमादाय तस्या उपरि प्रहारो विहितः । ततो मच्छिका उड्डीय गता । तेन श्चितधारेणाविना राज्ञो वस्त्रो द्विधा जातं राजा चुतस्र ॥

(b) अस्ति हस्तिनापुरे विलासो नाम रजकः । तस्य गर्दभो ऽतिभारवहनाद्बु दुर्वला सुमूर्षुर्रिवाभवत् । ततस्तेन रजकेनाधो व्याघ- चर्मणा प्रच्छाद्यारण्यसमीपे यवक्षेत्रे मोचितः । ततो दूरात्तमव- लोक्य व्याघ्रबुद्ध्या क्षत्रपतयः सर्वरं पलायन्ते । अय केनापि प्रचार- च्चक्षेन धुसरकम्बलकृततनुत्राणेन धनुःकाण्डं सज्जीकृत्यावनतकायेन एकान्ते स्थितम् । तं च दूराद्दृष्ट्वा गर्दभः पुष्टाङ्गो गर्दभोऽयमिति मत्वा उच्चैः शब्दं कुर्वाणस्तद्भिमुखं धावितः । ततस्तेन प्रचारच्चकेण चित्कारशब्दात् गर्दभोऽयमिति ज्ञात्वा लीलयैव व्यापादितः ॥

(c) कस्मिंश्चिद्वु वनोद्देशे जरनखरो नाम सिंहः प्रतिवसति स्म । स कदाचिदितस्ततश्च परिभ्रमन् चुत्तामकर्ण्णो न किञ्चिदपि सत्व- माससाद । ततस्त्वासनसमये महत्तौं गिरिगुहामासाद्य प्रविष्टश्चिन्त- यामास । नूनमेतस्यां गुहायां रात्रौ केनापि सत्वेनागन्तव्यम् । तन्नि- भृतो भूत्वा तिष्ठामि । एतस्मिन् अन्तरे तद्स्वामी दधिपुच्छो नाम शृगालः समायातः । स च यावत् पश्यति तावत् सिंहपद्पद्धतिर्गु- हायां प्रविष्टा न च निष्क्रामणं गता । ततश्चाचिन्तयत्, अहो ! विनष्टोऽस्मि ॥

6. Form sentences in Sanskrit illustrating the use of *any five* of 10 the following : —

   (a) द्वितीया with the suffix एनप् .

   (b) चतुर्थी with the root क्रूध .

   (c) भा + क्रस् in the Parasmaipada.

   (d) जन् + स्था in the Ātmanepada.

   (e) The causative (णिजन्त) of वि + सिन .

   (f) The desiderative (सनन्त) of दा .

   (g) The frequentative (यङन्त) of क्रस् .

7. Give *five* of the following forms :—

   (a) रु active voice लट् 3rd person singular.

   (b) दुह् active voice लुङ् 3rd person singular.

   (c) हन् active voice लुङ् 3rd person singular.

   d) भू active voice लिट् 3rd person singular.

5

(e) ह active voice हुर 3rd person singular.

(f) +नम्+यप .

(g) प+क्र+यप .

8. Translate *five* of the following into Sanskrit:— 25

(a) A Brāhman, though learned, was very poor. He had a grown-up daughter, and he was very anxious to get her married.

(b) He went to Dehli, lived there for six months, saw many Hindu noblemen, and got about four thousand rupees in jewellery and cash.

(c) Well pleased with the success of the sojourn, he thought of starting for home, but he was advised by his friends at Dehli to avoid a village notorious for its roguery.

(d) The Brāhman started back for his home, and as luck would have it, it was evening when he reached the village. There was a small stream which he easily leaped over.

(e) A woman was cleansing her plates. She thought this man must be a man of substance, otherwise how could he leap over this broad enough stream.

(f) She called the Brāhman, told him that it was evening, and the forest in front was extensive and infested with wild animals, and it would be advisable to pass the night at her home.

PĀLI.

Paper-sellers—
{ MAHAMAHOPADHYAYA   DR. SATISCHANDRA
    VIDYABHUSHANA, M.A., PH.D.
  BABU REBATINATH CHATTERJEE, M.A.
    „   NALINAKSHYA DATTA, M.A.

FIRST PAPER.

Examiner—BABU MUKUNDABEHARY MULLICK. M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

A. TEXTS.

1. Translate into English *any four* of the following extracts, add- 25
ing notes on the words italicized:—

(a) Karotha Buddhavacanaṁ, khaṇo ve mā *upaccagā*,
    khaṇātītā hi socanti nirayamhi samappitā.
    Pamādo rajo sabbadā, pamādānupatito rajo
    appamādena vijjāya *abbahe* sallam attano.

(b) So maṁ *asaṁsi*: 'ehi' ti, ahaṁ, 'emi' ti taṁ vadi,
    tassa matthakaṁ akkamma parakūle patitthahiṁ.
    Na tassa alikaṁ bhaṇitam yathāvācam akās'ahaṁ
    saccena me samo n'atthi, esā me saccapāramī.

(c) 'Jīvitaṁ dehi me sāmi, rajjaṁ dassāmi te ahaṁ,
karissām' itthikiccañ ca aññaṁ kiñci yathicchitaṁ.'
Adūbhatthāya sapathaṁ so taṁ yakkhiṁ akārayi.
'Ānehi bhacco sīgham' *vuttamattā* va sā nayi.

(d) Buddhavīra namo *tyatthu* sabbasattānam uttama
yo maṁ *dukkhā* pamocesi aññañ ca bahukaṁ janaṁ
Sabbadukkhaṁ pariññātaṁ, hetutaṇhā visositā,
ariyaṭṭhaṅgiko maggo nirodho phusito mayā.

(e) 'Gopī ca ahañ ca assavā, brahmacariyaṁ Sugate *carāmase*,
jātimaraṇassa pāragā dukhass' antakarā bhavāmase.'
'Nandati *puttehi* puttimā, gomikā gohi tath' eva nandati,
upadhī hi narassa nandanā, na hi so nandati yo nirūpadhi.'

2. Summarize in English :—   7
Either,

The dialogue between Buddha and Dhaniya, the cowherd.
Or,
The dialogue between Buddha and Māra, the Evil One.

3. (a) Give the characteristics of *any four* of the Navangas men-   4
tioned in the following couplet :—
Suttaṁ geyyaṁ veyyākaraṇaṁ gāthudānitivuttakaṁ
jātakabbhutavedallaṁ navaṅgaṁ Satthusāsanaṁ.

(b) Explain fully the metaphor in the following :—   3
Nadīnam api sotāni ayaṁ vāto visosayo
kiñ ca me pahitattassa lohitaṁ n'ūpasussaye.

(c) Explain the allusion in—   2
'Esa muñjaṁ parihare, dhī-r-atthu idha jīvitaṁ.'

4. Relate briefly in simple Pāli :—   9
Either,
The incidents connected with Vijaya's visit to Ceylon.
Or,
The circumstances that led to Buddhaghosa's voyage to Ceylon.

B. GRAMMAR.

5. Explain and illustrate the uses of *one* of the following case- 5
endings :—
catutthī, pañcamī, and *sattamī*.

6. (a) Comment on the formations of *any four* of the following :—   2
acchi, aṭṭhā, palavati, pecca. and *socare*.

(b) Give the passive forms of *any four* of the following :—   2
khāḍiti, pivati, suṇāti, vindati, and *jahāti*.

(c) Construct *two* sentences in Pāli to illustrate the uses of *mā*   2
with the aorist and with the imperative.

(d) Construct *two* sentences in Pāli containing correlatives.   2

(e) Derive *āruyha*, commenting on the formation, and give *three* 2
instances of similar derivation.

7. Render into idiomatic Pāli *any three* of the following :— better   6
than, for a long time, from kingdom to kingdom, and step by step.

8. How is hiatus prevented in Pāli in vowel sandhis ? Give exam- 4
ples to explain your answer.

C. TRANSLATION.

9. Translate into Pāli either (a) or (b):— 25

(a) In the days of yore, Surabhi, the mother of cows, was once
weeping in the celestial regions. Indra, the king of gods, took com-
passion on her, and asked her why she wept so bitterly. Pointing to
the world of mortals, Surabhi said in reply, ' Look there, O Protector
of the worlds ! Yonder wretch of a clown is oppressing my weak son
with a heavy plough, urging him ruthlessly with a wooden cudgel, in
consequence of which my poor child, agitated with agony, is falling
on the ground, and is on the point of death. It is for him that I
weep in heaviness of heart, and tears trickle down from my eyes.
Although I have a thousand children, I feel, O Lord, greater com-
passion for one that is weak and innocent.'

(b) A sage named Uttanaka practised penance in the Maru region.
Not far from his hermitage there was, in the deserts, a sea of sand
called Ujjānaka. Under the surface of it lived the demon Dhundhu,
bent on the destruction of the world. At the end of the year he
heaved a deep sigh and filled the earth and the sky with dust. The
sage Uttanaka invited the king Kuvalāśava to destroy him. The
king came with his hundred sons and caused the princes to dig the
ground where the demon lay concealed. They discovered Dhundhu
occupying the southern quarter of the horizon. Enraged at the
princes, the demon vomited flames of fire, which consumed ninety of
them. Thereupon the king, extinguishing the fire by his Yoga
power, attacked him sword in hand, and with one blow cut off his
head.

PĀLI.

SECOND PAPER.

Examiner—BABU MAHIMARANJAN BARUYA, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate *two* of the following extracts into English :— 25

(a) So Himavantato ākāse uppatitvā Tambapaṇṇidīpam gantvā
tattha Tambapaṇṇisare pallale sayamjātasālim khāditvā gacchati,
evam gacchanto va ' janapadam gantukāmā atthi, janapadam gan-
tukāmā atthīti' tikkhattum karuṇāya paribhāvitam mānusivācam
bhāsati. Te tassa vacanam sutvā upasaṃkamitvā añjalim paggayha
' sāmi, mayam janapadam gamissāmā' 'ti āhaṃsu. ' Tena hi may-
haṃ pitthim abhirūhathā' ' ti. Ath' ekacce abhirūhiṃsu ekacce
vāladhim gaṇhiṃsu ekacce añjalim paggahetvā aṭṭhaṃsu yeva.
Bodhisatto antamaso añjalim paggahetvā ṭhite sabbe pi te aḍḍhatey-
yasate vānije attano ānubhāvena janapadam netvā sakasakaṭṭhānesu

patiṭṭhāpetvā attano vasanatthānaṁ agamāsi.　Tāpi kho yakkhiniyo aññesaṁ āgatakāle te tattha ohinake aḍḍhateyyasate manusse vadhitvā khādiṁsu.

(b) Evaṁ me sutaṁ: Ekaṁ samayaṁ Bhagavā Bārāṇasiyaṁ viharati Isipatane migadāye.　Tatra kho Bhagavā pañcavaggiye bhikkhū āmantesi : ' dvo' me bhikkhave antā pabbajitena na sevitabbā.　Katame dvo.　Yo cāyaṁ kāmesu kāmasukhallokānuyogo hīno gammo pothujjaniko anariyo anatthasaṁhito, yo cāyaṁ attakilamathānuyogo dukkho anariyo anattha-saṁhito, ete kho bhikkhave ubho ante anupagamma majjhimā paṭipadā Tathāgatena abhisambuddhā cakkhukaraṇī ñāṇakaraṇī upasamāya abhiññāya sambodhāya nibbānāya saṁvattati.　Katamā ca sā bhikkhave majjhimā paṭipadā Tathāgatena abhisambuddhā cakkhukaraṇī ñāṇakaraṇī upasamāya abhiññāya saṁbodhāya nibbānāya saṁvattati.　Ayam eva ariyo aṭṭhaṅgiko maggo, seyyath' idaṁ: sammādiṭṭhi sammāsaṁkappo sammāvācā sammākammanto sammā-ājivo sammāvāyāmo sammāsati sammāsamādhi.'

(c) Evaṁ vutte Vacchagotto paribbājako Bhagavantaṁ etad avoca : ' Seyyathā pi bho Gotama gāmassa vā nigamassa vā avidūre mahā sālarukkho, tassa aniccatā sākhāpalāsaṁ palujjeyya, tacapapaṭikā palujjeyyuṁ, pheggu palujjeyya, so aparona samayena apagatasākhāpalāso apagatatacapāpatiko apagataphegguko suddho assa sāre patiṭṭhito, evam ev' idaṁ bhoto Gotamassa pāvacanaṁ apagatasākhāpalāsaṁ . . . suddhaṁ sāre patiṭṭhitaṁ.　Abhikkantaṁ bho Gotama, abhikkantaṁ bho Gotama, seyyathā pi bho Gotama nikkujjitam vā ukkujjeyya, paṭicchannaṁ vā vivaroyya, mūḷhassa vā maggaṁ ācikkheyya, andhakāre vā telapajjotaṁ dhāreyya " cakkhumanto rūpāni dakkhintiti ", evaṁ eva bhotā Gotamena anekapariyāyena dhammo pakāsito.　Es' āhaṁ bhavantaṁ Gotamaṁ saraṇaṁ gacchāmi dhamcañ ca bhikkhusaṁghañ ca, upāsakam maṁ bhavaṁ Gotamo dhāretu ajjataggo pāṇupetaṁ saraṇagatan' ti.　Aggi-Vacchagotta suttantaṁ.

2. (a) Derive *uppatitvā* and *paggayha* in the extract (a) in the above, *pothujjaniko* in (b), and *pāvacanaṁ* in (c).　　　　4

(b) Name and expound the samāsas in *three* of the following :—　6
yāvajivaṁ, daḷhagahitasiṅālo, asaddhammasamannāgato, catujātigandhasamuggaṁ, and *nimmakkhikamadhupatalasadisaṁ*.

(c) Decline *three* of the following :—*Pumā* in the instrumental case ; *cakkhu* in the ablative case ; *āyu* in the objective case ; and *tumha* in the dative case.　　　　3

(d) Conjugate *two* of the following roots in the present indefinite (*vattamānā*) and the aorist (*ajjatani*) :—*thā, cur*, and *gah*.　　5

(e) Give the forms in the superlative degree of *two* of the following,—*yuvā, guru*, and *pasattho*.　　　　2

Either,

3. Explain that ' Rebirth is not transmigration.'　　　　6

Or,

Give a summary of what is stated regarding Yasapabbajjā.

4. Relate the incidents leading to Devadatta's malice aganist Buddha.　　　　7

5. Give in Pāli the substance of the following :—　　　4
Nibbutā nūna sā mātā, nibbuto nūna so pitā,
nibbutā nūnā sā nārī yassāyaṁ idiso patīti.

6. Answer *one* of the following :—　·　　　　8
(a) What do you understand by the term *Jātaka* ?

(b) Give a summary of the legend regarding Mahosadha's marriage.

7. Translate the following extracts into English :— 30

. (a) Atîte Bodhisatto vaṇijjāya jîvikaṁ kappeti. Tadā Kāsiratthe ekasmiṁ paccantagāme bahū vaḍḍhakî vasanti. Tath' eko phahíta-vaḍḍhaki rukkhaṁ tacchati. Ath' assa eko makaso sîse nisîditvā sattiyā paharanto viya sîsaṁ mukhatuṇḍakena vijjhi. So attano santike nisinnaṁ puttaṁ āha : ' tâta, mayhaṁ sîsaṁ makaso sattiyā paharanto viya uijjhati, vārehi tan' ti. ' Tūta, adhivāsehi, ekappahārena naṁ marossamîti.' Atha so vaḍḍhaki puttaṁ āha : 'tâta. imaṁ makasaṁ vārehîti.' So ' vāressāmi tâtâ' ti tikhiṇaṁ mahāpharasaṁ ukkhipitvā pitu pitthipasse thatvā ' makasaṁ pahāressāmîti' pitu matthakaṁ dvidhā bhindi.

(b) Ath' eko vako Gaṅgâtîre pāsāṇapitthe vasati. Atha Gaṅgāya himodakaṁ āgantvā taṁ pāsāṇaṁ parikkhipi. Vako abhirūhitvā pāsāṇapitthe nipajji, n' ev' assa gocaro atthi na gocarāya gamanamaggo, udakam pi vaḍḍhat' eva, so cintesi : ' mayhaṁ n'eva gocaro atthi na gocarāya gamanamaggo, nikkammassa pana nipajjanato upasothakammaṁ varan' ti manasā va upasothaṁ adhitthāya sîlāni samādiyitvā nipajji.

1. Narrate briefly in simple Bengali prose the principal incidents 10 of the life of Gouranga as depicted in your text.

2. Name *any two* of the other works of the authors of *Meghanad-* 4 *badh* and *Pravash*, and mention the names of the Sanskrit works on which the subject-matters of these two books are respectively based.

3. Define, closely following your text, মহাকাব্য, দৃশ্যকাব্য, and 5 রস ; quote any passage from any of your text-books which is remarkable for প্রসাদগুণ.

4. Explain extracts (a) and (b), and *any three* of the rest, with full 22 reference to their contexts :—

(a) সৃষ্টির এমন সৃষ্টি যেভাবে করিবে দৃষ্টি
     দেখ মঙ্গলের ভাবে মঙ্গল সকল ;
     অমঙ্গল ভাবে দেখ সব অমঙ্গল ।

কি মঙ্গল, অমঙ্গল সুখ, দুঃখ যাহা বল
সকলি মানবমনে ; জগত কেবল
সুখময় শোভাময় অনন্ত মঙ্গল ।

(b) মৃত্যু নহে বিভীষিকা ; মৃত্যু আশাময় ;
অমর আত্মার মুখ্য শোধন আগার
তারি অধিকারে । সে সেথায় নিজ হাতে,
আত্মার দৈহিক শেষ প্রবৃত্তি-স্ফুলিঙ্গ
নিঃশেষে নিভা'য়ে, আপনার হিমনীরে
মুক্তিস্নান করাইয়া ; নিয়ে যায় তারে
নব ঐশ্বর্য্যের দ্বারে শান্তিমন্ত্র জপি ।

(c) কর কর্ম্ম, এই প্রতিপ্রতিকূলে আর
পশুত্ব-জড়ত্ব পা'বে জন্ম জন্মান্তর ।
দেখ বিবর্ত্তন গর্ভে করে আকর্ষণ
জীবে জীব, জলে জল । হইবে অঙ্কিত
কর্ম্মফলে যে প্রকৃতি আত্মায় যখন
সেইরূপ ক্ষেত্রে আত্মা হ'বে আকর্ষিত ।

(d) রাবণের অঙ্গনয় পদের প্রহারে
ঠেলি পতিব্রতাধর্ম্ম পালিলা মৈথিলী ;
জ্যেষ্ঠ ভক্তিবশে জটা ভরতের শিরে
সে পদ, সে শির পূত পরস্পর মিলি ।

(e) শান্ত, ক্ষুদ্র, তরঙ্গিত অসীম সাগর
বিরাজিছে মহিমায় ব্যাপি দিগন্তর ;
সহস্রজতম গুণে কেশব যেমতি
বর্ণিবে স্বরূপ তাঁর কাহার শকতি ।

(f) দূষিত শোণিতপায়ী জলৌকার মত
নিন্দুকেরা আমাদের ধাতু সংশোধক ।
নিন্দা পরীক্ষার চাপে যে পড়িবে নামি
তার স্থিতি ভয়রথে শূন্য ধ্বজা সম ।

5. Explain the allusions in :—   **3**

 (a) কিম্বা বিশ্বাধরা রমা অম্বুরাশি তলে ।

 (b) মুনিগণ স্নানহেতু আনিলা গঙ্গায় ।

 (c) সঙ্গী সারমেয়ে করিয়াছিলেন রক্ষা সর্ব সমর্পণে ।

6. Translate into English :— 12

এইরূপে সখি ! কাটাইনু কত কাল পঞ্চবটী বনে সুখে ।
ননদিনী তব বিষম জ্ঞাল আসি ঘটাইল শেষে । শরমে, সরমা সই !
মরি লো স্মরিলে তার কথা ; ধিক্ তারে, নারীকুলকালি ! চাহিল
মারিয়া। মোরে বরিতে বাঘিনী রঘুবরে । ঘোর রোষে সৌমিত্রি কেশরী
খেদাইলা দূরে তারে । আইল ধাইয়া রাক্ষস ; তুমুল রণ বাজিল
কাননে । সভয়ে পশিনু আমি কুটীর মাঝারে ।

7. Account for the ই in সৌমিত্রি and the ঈ in কেশরী in the 5
above extract. Point out the words in the same used with peculiar
significance.

8. (a) Combine in the *sandhi* form the undermentioned words re- 13
ferring to the grammatical rule applicable in each case :—

অহঃ + রাত্র ; মহান্ + শদঃ ; পিতৃ + আজ্ঞা and পুম্ + কোকিলঃ ।

(b) Account for the ণ in প্রণাম, and refer to any exception to
the rule.

(c) Give the opposite genders of—

যবন, করী, সাধ্বী, বিদূষী, and ধীমান.

(d) Put the suffix মৎ, or বৎ after each of the following words
as grammatically befit them :—

প্রজ্ঞা, বিদ্ব, and সম্পত্তি ।

(e) Give an example of each of the following :—
একশেষদ্বন্দ্ব, অব্যয়ীভাব and কালাধিকরণ. Define them.

9. Rewrite, correcting all errors :— 5

কালীদাস রাজা বিক্রমাদিত্যের সময়ে উপস্থিত ছিলেন । তাঁহার
কাব্যশক্তির জন্য রাজা তাঁহার প্রতি স্নেহার্দ্র ব্যবহারে সর্বদা সন্তোষ
করিতেন । এইজন্য কেহ কেহ কালীদাসকে ঈর্শবশে লাঞ্ছনা করিবার
অবকাশ চাহিতেন ।

10. Translate into English *one* of the following extracts :— 21

(a) মগধের রাজধানী পাটলিপুত্র নগরে আজ শোকোৎসব । অদ্য
মহারাজ মহানন্দের পিতৃশ্রাদ্ধ । রাজবাটীর সুবিস্তৃত প্রাঙ্গণে চন্দ্রা-
তপতলে বিরাট শ্রাদ্ধসভা হইয়াছে । নানা দিগ্দেশ হইতে লোক
জনের সমাগম হইতেছে । সভামধ্যে শাস্ত্রব্যবসায়ী ব্রাহ্মণবর্গ এক
দিকে সমবেত হইয়াছেন । নানা প্রকার শাস্ত্রীয় তর্কবিতর্ক হইতেছে ।
অপর দিকে পাত্রমিত্র সকলে সমবেত হইয়া শাস্ত্রালোচনা শুনিতেছেন ।
কোথাও উৎসর্গের নিমিত্ত সজ্জীকৃত অশ্বগজাদি শোভা পাইতেছে ;

12

কোথাও স্বর্ণ ও রজতনির্মিত তৈজসাদি সূর্য্যকিরণে প্রতিফলিত হইতেছে। সাধারণ দর্শকবর্গ সোৎসুকনয়নে চারিদিকে চাহিতেছে। বাহিরে ভট্টগণ তারস্বরে মৃতের গুণগান ও অক্ষয়স্বর্গের কামনা করিতেছে। সর্ব্বত্র কেমন একটা ঔৎসুক্য ও ব্যস্ততার ভাব লক্ষিত হইতেছে।

(৮) মহারাজ রাজ্যবর্ম্মের স্বাস্থ্য বাল্যকাল হইতেই ভাল ছিল না। কিন্তু তাহাতে কি? তাঁহার ইচ্ছাশক্তি অদম্য ছিল। তিনি ক্রুগ্ন ও ক্ষীণকায় ছিলেন; তথাপি তাঁহার পাঠানুরাগ, বৈজ্ঞানিক অনুসন্ধিৎসা এবং প্রজার হিতসাধনেচ্ছা কখনও মন্দীভূত হয় নাই। অধিকন্তু ঐ সকল তাঁহার বয়সের সহিত উত্তরোত্তর বৃদ্ধি পাইয়াছিল। নানা বিদ্যায় সুপণ্ডিত হইয়া স্বীয় রাজ্যের সুশাসন করিবেন ইহা তাঁহার ঐকান্তিক ইচ্ছা ছিল। এই জন্য তিনি বাল্যকাল হইতে সেই সঙ্কল্প-সিদ্ধির উদ্দেশে কঠোর সাধনা করিয়াছিলেন। মন্ত্রণাকুশল স্যর মাধবরাও ও স্যর সলর জঙ্গের জীবনী পাঠেও উচ্চাকাঙ্ক্ষী যুবক অনেক বিষয় শিখিতে পারেন। উপযুক্ত ধিদাবুদ্ধি ও ক্ষমতা থাকিলে এবং প্রশস্ত কর্ম্মক্ষেত্র পাইলে এখনও ভারতীয় যুবক কিরূপ রাজ-নীতিকুশল হইতে পারেন ইঁহাদিগের জীবনীতে তাহা বেশ জানিতে পারা যায়।

BENGALI.

(*For Female Candidates*).

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Explain *any three* of the following extracts:—   30

(*a*) অগ্নি পরীক্ষা, এক অর্থে উচ্চ পদার্ঘ, উন্নত জীবনের অপরি-হার্য্য সঙ্গী। সোণা যেমন আগুনে সন্তাপিত কিংবা স্বচাক্রূপে অগ্নিপরীক্ষিত না হইয়া মনুষ্যের আভরণ হইতে পারে না; সেইরূপ যাঁহারা মনুষ্যজাতির সোণা, চিত্তের উচ্চতা ও উদারতা এবং চরিত্রের অলোকসাধারণ মহত্ব অথবা পবিত্রতার স্বর্ণজাতীয়, তাঁহারাও অশেষ প্রকারে অগ্নিপরীক্ষার অধীন না হইয়া জগতের নরনারীর আদর্শস্থানীয় হইতে পারেন না।

(b) মনুষ্যের শারীরিক ও মানসিক বৃত্তি সকলেরই সামকালিক যথোচিত স্ফূর্তি এবং উন্নতি মনুষ্যদেহ ধারণের প্রধান উদ্দেশ্য। তবে যাহাতে কতকগুলির অধিকতর পরিপুষ্টি এবং কতকগুলির প্রতি অাচ্ছীল্য জন্মে তাহা মনুষ্যের অনিষ্টকর। মনুষ্য অনেক এবং একজন মনুষ্যের সুখও বহুবিধ। তত্তাবৎ সাধনের জন্য বহুবিধ ভিন্ন ভিন্ন প্রকারের কার্যের আবশ্যকতা। ভিন্ন ভিন্ন প্রকারের কার্য্য ভিন্ন ভিন্ন প্রকৃতির লোকের দ্বারা ভিন্ন সম্পন্ন হইতে পারে না।

(c) দুঃখের দ্বারা, নিজেকে উপরে না তুলিয়া, নিজেকে অভিভূত করিয়া অতলে ডুবাইয়া দেওয়াই দুঃখের অবমাননা। যাহাকে যথার্থ ভাবে বহন করিতে পারিলেই জীবন সার্থক হয়, তাহা দ্বারা আত্মহত্যা সাধন করিতে বসিলে দুঃখদেবতার কাছে অপরাধী হইতে হয়। দুঃখের দ্বারা আত্মাকে অবজ্ঞা না করি, দুঃখের দ্বারাই যেন আত্মার সম্মান উপলব্ধি করিতে পারি।

(d) আমাদিগের এই দুঃস্থ, অধঃপতিত দেশে ক্ষমা, দানশীলতা প্রভৃতি কোমল সদ্গুণ সকলের যত গৌরব, স্বায়পরতা, সত্যাচার, বাগ্নিষ্ঠা, দৃঢ়প্রতিজ্ঞতা, অধ্যবসায় প্রভৃতি কঠোর সদ্গুণ সকলের গৌরব তেমন অধিক নহে। কিন্তু যেমন স্ত্রী পুরুষের মিলনেই সংসারের উৎপত্তি এবং সুখ তেমনি ঐ কোমল এবং কঠোর উভয় প্রকার গুণের মিলনেই সৎকার্যের উৎপত্তি এবং ধর্ম। কোমল গুণগুলি কঠোর গুণগুলির অভাবে প্রকৃত পথে থাকিতে পারে না।

2. Translate into English :— 10

বাড়ীর বাহিরের ফটকের কাছে যাইতেই ইউলিসিজের গলার স্বর শুনিয়া একটী বৃদ্ধ কুকুর লেজ নাড়িতে নাড়িতে তাঁহার পায়ের কাছে আসিল। ইউলিসিজ চিনিতে পারিলেন সেটী তাঁহারই পোষা কুকুর আর্গস। এক সময়ে সে তাঁহার শিকারের সাথী ছিল তাহার বলবিক্রমই বা কত ছিল ইউলিসিজ তাহাকে আদর যত্নই বা কত করিতেন। ইউলিসিজ যুদ্ধে যাইবার পর তাহাকে কেহ তেমন যত্ন করিত না।

3. Explain, with full reference to their contexts, *any three* of the 15 following passages :—

(a) এই ধ্যান প্রভাবেই এদেশের শিল্পিগণ মৃত্তিকায় বা প্রস্তর প্রতিমায় নিরুপম ভাব প্রকাশ করিতে সমর্থ হইয়াছেন। ইহা হইতেই বুঝা যাইতেছে যে ভারতের শিল্পিগণ কেবলমাত্র শিল্পী নহেন, তাঁহারা সাধকও বটেন। সেই জন্যই ভারতশিল্প ভক্তিপূর্ণ হৃদয়ে বুদ্ধদেবের

ধ্যানমূর্তির পূজা করিয়াছে, কিন্তু কোথাও ধর্ম্মাশোকের মূর্ত্তি স্থাপন করে নাই ।

(b) কালের দুর্ভেদ্য অন্ধতমসাবরণে পরিস্ফুটভাবে প্রত্যক্ষীভূত না হইলেও আজিও তাঁহার সেই উজ্জ্বল মূর্ত্তি, সেই ভূতদয়ামধুর জলদ-গম্ভীর স্বর আর সেই অদ্ভুত হৃদয়বক্তার নিঃসন্দিগ্ধ নিদর্শনরাজী ভারতের পুণ্যক্ষেত্র সমূহ হইতে আবিষ্কৃত হইতেছে । নীরব প্রস্তরময় গিরিগাত্রে আজিও তাঁহার অনুভাববজড়িত আদেশবাণী যেন প্রতিধ্বনিত হইতেছে ।

(c) তিনি ব্রতপরায়ণা তাপসীর ন্যায় ধরাসনে উপবেশন করিয়া আছেন এবং সন্দেহাত্মক স্মৃতির ন্যায়, পতিত সমৃদ্ধির ন্যায়, স্খলিত শ্রদ্ধার ন্যায়, কলুষিত বুদ্ধির ন্যায় ও অমূলক অপবাদে কলঙ্কিত কীর্ত্তির ন্যায় যার পর নাই শোচনীয় হইয়া বিরাজ করিতেছেন ।

(d) কাহারও হস্তে আর্দ্রবস্ত্রথও দ্বারা আচ্ছাদিত মুখ নারিকেল সম্পুটকে সুগন্ধি অঙ্গরাগ, কাহারও করে মালতীমালা, কাহারও বা পাণিতলে নিঃশ্বাস মারুত হরণীয়, নির্ম্মোক শুচিধবল কন্দলতা দুকূল এবং এক জনের হস্তে লক্ষ্মীর হাসারেখার ন্যায় নির্ম্মলসুন্দর মহার্ঘ্য হার ।

4. Describe, closely imitating the style of your text, Chandrapid's   7
visit to the hermitage of মহাশ্বেতা ।

5. State what you know about *any two* of the following :—   6

     পত্রলেখা, মহেন্দ্র, পেট্রোক্লস, ঋতুপর্ণ and ইউরিক্লিয়া ।

6. Form adjectives from গিরি, জটা, and অরণ্য, and abstract nouns   3
from তরুণ, ধনবান, and পতিত্রতা,

7. Construct illustrative sentences with the following :—   4

     অসূয়াপরবশ, কিংকর্ত্তব্যবিমূঢ়, আপাত মনোরম, and ভীষণ মনোহর ।

8. Derive বিদীর্ণ, ভাসমান, বৈপরীত্য, and মুগ্ধয়া ।   2

9. Expound the *samāsas* :—   3

     পিতৃসত্যপালনার্থ ; ক্ষণভঙ্গুর and প্রভাতম্বিন্ধসমীরণাহত ।

10. Translate into English :—   20

আমার চাকরটী পূর্ব্বে একটা বিদ্যালয়ে পাঠ করিয়াছিল । যখন আমার ছোট ছেলেটী পণ্ডিত মহাশয়ের নিকট পাঠ বলিয়া নয়, সে দাঁড়াইয়া শুনে এবং ভুল হইলে দুই একটী ধরিয়া দিতে পারে । তাহারই বাপ আমার পিতৃঠাকুরের নিকট চাকুরী করিত । সে লেখা-পড়ার কোন ধার ধারিত না । আমার পিতাঠাকুরের এবং আমার

চাকরের বাপের মধ্যে যে অন্তর ছিল, আমাতে এবং আমার চাকরে সে অন্তর নাই। অথচ আমার পিতা তাঁহার চাকরের গায়ে হাত তুলিতেন না। আমি আমার চাকরকে মারিলেও মারিতে পারি। অন্ততঃ যদি মারি.আমার সমকক্ষ ব্যক্তি আমার বিশেষ কোন নিন্দা করিবেন, বোধ হয় না।

ASSAMESE.

(*For Female Candidates*).

Paper-setter and Examiner—BABU LAKSHMINARAYAN BEZBARUYA. B.A.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Name the author of *Vanaparba* in Assamese, and *any two* of the   3
other works by him.
2. Explain *any two* of the following passages, explaining allusions
where necessary :—

    (*a*) হেনয় ঈশ্বৰ যিতো অগতিৰ গতি।   5
        দেবকীৰ গৰ্ভে আসি ভৈল উত্পতি॥
        গোকুলত থাকিলাহা ছৱালৰ ছলে।
        বান্ধিলা যশোদা তাক ভকতিৰ বলে॥

    (*b*) শকুনি বোলন্ত আবে আদেশ নৃপতি।   5
        শুনা যেন কহোঁ মই উত্তম যুগুতি॥
        যজ্ঞ কৰিলন্ত যুধিষ্ঠিৰ নৃপবৰ।
        ৰহিল খিয়াতি তেবে চন্দ্ৰ দিবাকৰ॥

    (*c*) তোমাৰ কটাক্ষ দৃষ্টি   পায়া নৃত্য কৰে মায়া,   5
                ভৰি তুলি মৰ্দ্দে মোৰ মাথা,
      পৱম আতুৰ হয়া   তোমাত শৰণ লৈলোঁ,
                মায়াক নিবাৰা জগন্নাথ॥

3. Write explanatory notes on :—   10

ৰাধাস্তুত, গঙ্গাস্তুত, শকুনি, যাজ্ঞসেনী, ইন্দ্ৰপ্ৰস্থ, দুঃশাসন,
বৃকোদৰ, ধনঞ্জয়, পাশুপত, বৃষভ-বাহন।

4. Translate into English :— 15

হৰেচিয় সকলেপৰা নিচেই নিশকতীয়া আৰু শাৰীৰিক দুৰ্ব্বল
লৰা আছিল । তেওঁৰ ইচ্ছা অনুযায়ী, পিতাকে যেতিয়া তেওঁক
মোমায়েকৰ লগত নাবিক জীৱন যাপন কৰিবলৈ আগ বঢ়ায়,
তেতিয়া কেপ্টইন মৰিচে এনে ভাবে হে উত্তৰ পঠালে যে, বপুৰি হৱে-
চিয়ই নে৷ কি অপৰাধত তেনে কৰ্ত্তৰা জীৱনৰ বাট ধৰিবলৈ বাধ্য হল ।
হৰেচিয়ৰ নিচিনা নিশকতীয়া আৰু ঢিলা বান্ধৰ লৰাৰ পক্ষে কঠিন
পৰিশ্রমৰ নাবিক জীৱন যাপন কৰাটো অসম্ভৱ ; এতেকে তেওঁক
ঘৰতে ৰাখি আন এটি লৰাক পঠাৱা হে উচিত ।

5. Give derivations of the following :— 4

সনাতন, দানৱ, দৈত্য, ব্যাঘ্র ।

6. Give different significations, if any, of the following :— 6

মুনি and ঋষি, জায়া and সহধর্ম্মিনী, দ্বিজ and ব্রাহ্মণ ।

7. Expound the following *samāsas* :— 4

কৃষ্ণকথা, সংসাসাগৰৰ, সিংহযান, কাঠচিতীয়া ।

8. Rewrite the following, correcting the errors :— 8

ময় বেজেৰৰা মনে তুলক মূৰ কৰি অকলে অকলে আলিবাতেদি
গৈ আছিলোঁ৷ এটা গভীৰ দুঃখৰ আসক্তাই মোৰ গোটেই হৃদয়টো
আৱৰিত কৰি থৈছিল ; নিৱশাত গোটেই শৰিৰ অৱশন্ন আৰু কেনিও
দেখিবৰ মন নগৈছিলে ।

9. Give the opposite genders of :— 5

দেউতা, নট্ৰা, তাপস, সৰ্গদেও, ভোমোৰা ।

10. Construct five sentences in Assamese, using at least one of the 5
following words in each :—

মাঁতৈ, প্রত্যাখ্যান, বিস্বাধৱ, বস-চোৰ, মাটি-চপৰীয়া, মৃগ-
নয়না, বজ্জ্ঞন, হৱিভৱ ।

11. Render into English *any two* of the following passages :—

(*a*) উচিত সীমাৰ ইপাৰ বা সিপাৰ হলে, সকলো শক্তিৰঅনিষ্ট ঘটে । 15
বোধ বা অনুভৱ শক্তিক সমূলি কাৰ্য্যত নলগালে সি স্বাভাৱিক বল
হেৰুৱাই মানুহক কৰ্ত্তৰা কৰি তোলে, আৰু উচিত সীমা পাৰ কৰি, বা
অতিচাৰ ব্যৱহাৰত লগালেও তাৰ বল ক্ষয় হয় আৰু সি মানুহৰ অনিষ্ট
ঘটায় । আনন্দত বৰকৈ উতলা হোৱা বা বেজাৰত অতিকৈ অধীৰ
হোৱা মানুহে আপোনাৰ অনিষ্ট আপুনি ঘটায় ।

(৮) হোৰাৎ নামে এজন "মিল" বা কাঠ-ফলা কল চলাই থোৱা   15
ব্যবসায়ী আছিল ; তেওঁ বৰ অৰ্থপিপাসু মানুহ। তেওঁৰ দৰে অৰ্থৰ
নিমিতে পৱি-মৰা মানুহ পাবলৈ নাছিল। বাস্তৱতে নিজৰ আকাঙ্ক্ষাৰ
জোখাৰ হোৰাৎ চহকী নাছিল ; তেওঁৰ সম্পত্তিৰ ভিতৰত এটা কাঠ-
ফলা কল আছিল, দেয়ে তেওঁৰ জীৱিকা আৰ্জ্জনৰ এক মাত্ৰ উপায়।

(৩) আমাৰ ভিতৰত কোনেও এনেকুৱা এটা পোক আগেয়ে   15
কেতিয়াও দেখা নাছিল। সেই কাৰণে ইয়াক দেখি আমাৰ সকলোৱে
ভয় লাগিল। আমি ভয়ত চিঞৰি কৱলৈ ধৰিলোঁ—" এই ভয় লগা
জন্তুটোক খোটালিটোৰ পৰা উলিয়াই দে।" কিন্তু ভয়ত কেৰে কাষ
চাপিব নোৱাৰিলে।

ASSAMESE.

(For Female Candidates).

Second Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Comment on the appropriateness of the words underlined in   7
the following extract :—

সূত্ৰধাৰ। (নেপথ্যাৰ ফালনৈ চাই) আইদেও, যদি সাজ পিন্ধোৱা
হল, তেনেহলে এই পিনে আহোক।

নটী। (প্ৰবেশ কৰি) দেউতা. এই মহ আছোঁ।

2. Point out wherein Kalidasa deviates in the subject-matter of   6
his drama *Sakuntala* from the story as given in the *Mahabharat*.

.3. Quote the words of দুষ্যন্ত as far as possible, where he is giving   5
description of Sakuntala's beauty to বিদূষক।

4. Explain the allusion in the following :—   5

সাৰথি। (ৰাজ্জাটৈ আৰু পহৰটোটৈ চাই) সৰ্গদেও ! মই এই
কৃষ্ণসাৰ পহৰটোটৈ, আৰু গুণ-লগোৱা ধনুটৈ তাৰ পাচত খেদা দিয়া
সৰ্গদেওটৈ চকু দি, মৃগৰূপ ধৰা যজ্ঞক খেদি যোৱা সাক্ষাৎ মহাদেৱৰ
নিচিনা দেখিছোঁ।

5. Give in your own words the estimate you have formed of the   6
character of দুষ্যন্ত after his return to his capital, in his behaviour

towards Sakuntala, apart from the consideration of the circumstance of the curse under which he laboured.

6. Translate into English :— 10

কাশ্যপ । হে ওচৰত থকা তপোবনৰ বৃক্ষসকল ! যি, তোমা-লোকে পানী নেখালে আগেয়ে পানী খাব নোখোজে, যি আভৰণ-প্রিয় হৈও মৰমত তোমালোকৰ পাত এটি নলয়, আৰু তোমালোকৰ প্রথমে ফুল ওলোৱাৰ সময়ত যাৰ মহা উৎসৱ হয়, সেই এই শকুন্তলা আজি গিৰিষেকৰ ঘৰলৈ যায়, সকলোৱে বিদায় দিয়াঁইক ।

7. State which of the acts in the *Sakuntala* you like most, and why ? 5

8. Expound the following *samāsas* :— 10

অভয়দান-যজ্ঞৱতী, বিজয়-যাত্রা, মদিৱেক্ষণে, মদন-বাণহত, কৱ ভোক্, লতামণ্ডপ, টিঙ্গিৰি-তুলা, সংসাৰ-নিস্পৃহ, বেদবিহিত, নষ্টস্মৃতি ।

9. Explain the following :— 10

সপ্তপৰ্ণবেদী, পৰিগ্ৰহ, কোকুমোকালি, ত্রিশঙ্কু, শশাঙ্কলেখা, বিশাখাত্বৰাহাল, মণিবন্ধ, চূত-মঞ্জৱী, কঞ্চুকী, অপ্সৱাঘাট ।

10. Give in your own words in English the purport of the following :— 6

চাৰি সাগৱে বেৰি থোৱা পৃথিৱীৰ অনেক কাল সত্তিনী চৈ, দুষ্যন্তৰ পৰা হোঁধা তোমাৰ প্রতিদ্বন্দীশূন্য পুত্রক সিংহাসনত বহৱাই, আৰু গিৰিষাই পৱিজনবিলাকৰ ভাৱ পোৰাৰ হাতত অর্পণ কৰিলে, তুমি তেওঁৱে চৈতেই আহি আকৌ এই শান্তিময় আশ্রমত বাস কৰিবাহি ।

11. Render into English *any two* of the following :—

(a) অতি অলপ সময়ৰ পাচতে গৃহস্থ আৰু গৃহিণী উভতি যথাস্থানত 15 উপস্থিত. হলগৈ । দুয়ো আনন্দত উলাহিত চৈ, যিমান সোনকালে পাৱে পাথৱৰ ঢাকনিধন লুটিয়ালে । কিন্তু হায়, পোহনীয়া দুৱা-কাঙ্কাৰ ফল কি পোৱা গল ?—লাভৰ ভিতৱত, জীৱিকাৰ একমাত্র উপায় " মিলটি " ও মাটিত উভলি পৰি অসুখীয়া ব্যৱসায়িক জীয়াতে মৰা কৰিলে ।

(b) আমাৰ ইয়াত এটা জনৱৰ আছে যে মিষ্ঠৰ গ্রেড্ষ্টোন তৃতীয় 15 শ্রেণীৰ গাড়ীত হে ফুৰিছিল । কিন্তু বিলাতৰ তৃতীয় শ্রেণী আৰু ইয়াৰ তৃতীয় শ্রেণীৰ মাজত ঢেৰ ভিন, যদিও অৱশ্যে গ্রেড্ষ্টোনৰ দৰে মানুহৰ তাতো তৃতীয় শ্রেণীত ফুৱাটো এটা আচৰিত আৰু গৌৰৱৰ কথা । তাত তৃতীয় শ্রেণীত ফুৱাটোৱেই নিয়ম, প্রথম আৰু দ্বিতীয় শ্রেণীত থাকৰ ভাগ মানুহ হে ফুৱে ।

(c) কালত ডাক্তৰবীৰাৰ পত্নীয়ে এটি স্থলক্ষণীয়৷ পুত্র সন্তান প্রসর   15
কৰিলে।   মাকে লৰাটিৰ নাম থলে চাওফুং।   মৰাণৰীৰ গর্ভজাত
ডাক্তৰবীৰাৰ সন্তান দিনক-দিনে ডাঙ্ৰ হৈ আহিল।   চাওফুঙৰ বয়স
বোল বছৰত সোমাল।   চাওফুঙে এভিয়া মৰাণ কুলৰ বৃত্তি অনুসৰি
ৰজাৰ ঘৰত খৰি যোগাব লগা হল।   তাহানি তেওঁৰ পিতৃয়ে দি যোৱা
উপদেশ মনত ৰাখি তেওঁ নিতৌ ৰজাৰ ঘৰত খৰি যোগাবলৈ ধৰিলে।

ARABIC.

Paper-setters—
{
SHAMSUL-ULMA ABU NASR MUHAMMAD
WAHEED, M.A.
MAULAVI MD. IRFAN, M.A.
}

FIRST PAPER.

Examiner—SHAMSUL-ULMA ABU NASR MUHAMMAD
WAHEED, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1.   Translate into English *any one* of the following :—   13

(a) قالوا يا ابانا اذا ذهبنا نستبق و تركنا يوسف عند متاعنا
فاكله الذئب و ما انت بمؤمن لنا و لو كنا صادقين * و جاؤا
على قميصه بدم كذب - قال بل سولت لكم انفسكم امرا - فصبر
جميل - و الله المستعان على ما تصفون * و جاءت سيارة فارسلوا
واردهم - فادلى دلوه - قال يا بشرى هذا غلام - و اسروه بضاعة -
و الله عليم بما يعملون * و شروه بثمن بخس دراهم معدودة -
و كانوا فيه من الزاهدين *

(b) و اوحى الى نوح انه لن يؤمن من قومك الا من قد امن
فلا تبتئس بما كانوا يفعلون * و اصنع الفلك باعيننا - و لا تخاطبنى

فى الذين ظلموا - انهم مغرقون * ويصنع الفلك وكلما مر عليه
ملأ من قومه سخروا منه - قال ان تسخروا منا فانا نسخر منكم
كما تسخرون * فسوف تعلمون من ياتيه عذاب يخزيه و يحل
عليه عذاب مقيم * حتى اذا جاء امرنا و فار التنور - قلنا احمل
فيها من كل زوجين اثنين و اهلك الا من سبق عليه القول
و من امن - وما امن معه الا قليل *

2 (a) Parse the underlined words in (a) or (b) of Question 1.　　8

(b) Give the تعليل of مستعان - تصفون - أمن. - يحل and قلنا.　　10

3　Translate into English one of the following:—　　12

(a) حكى ان حية دخلت تحت سرير كسرى فارادوا قتلها
فنهاهم عنه و امر بعض مقدميه ان يتبعها فجاءت الى بئر و صارت
تنظر الى البئر و الى الرجل فعلم الرجل مرادها فنظر فى البئر
فراى حية مقتولة و فوقها عقرب فعمد الرجل الى العقرب و قتله
فاقبلت الحية على كسرى و القت من فمها بين يديه بذرا
فزرعه كسرى فنبت منه الريحان الفارسى و كان كسرى كثير
الزكام فاستعمله فنفعه وبرأ منه و الله اعلم *

(b) حكى ان انسانا هرب من اسد فوقع فى بئر - و وقع الاسد
عليه - فراى الاسد فى البئر دبا - فقال له الاسد كم لك ههنا -
فقال له منذ ايام و قد قتلنى الجوع - فقال له دعنا ناكل هذا
الانسان فنكفى الجوع - فقال له اذا عاودنا الجوع مرة اخرى
فماذا نصنع - و لكن الاولى اذنا نحلف له ان لا نؤذية فيحتال
فى خلاصنا لانه اقدر منا على الحيلة - فحلفا له - فاحتال
حتى خلص و خلصهما - فكان نظر الدب اكمل من نظر الاسد *

4. Give vowel-signs (اعراب) to passage 3 (b) printed above.　10

5. Give the singular or plural, as the case may be, of the following :— 　7

جُدَّة - بِذْرِ - سرير - ريحان - فم - دراهم - قميص - كسرى - سيارة -
.عصا - تَنِّين - عصى - حِيلَة - اسد

6. Answer *any three* of the following :— 　10

    (a) Define غير المنصرف and give examples.

    (b) Enumerate the various kinds of مفعول with examples.

    (c) Give the characteristics of باب تفعيل and باب انفعال.

    (d) Define حال and give examples.

    (e) Enumerate الحروف المشبهة بالفعل and state their use.

7. Correct the following :— 　10

قيل لما حبط أدمُ من الجِدَّة الى الارضَ لم يكون فيه غير
النسر فى البر و الحوتُ فى البحر و كان النسر تأوى الى الحوت
و يبيت عنده - فلما رأى النسر أدما اتى الى الحوت و قال لها
قد وجدت اليومُ فى الارض من تمشي على رجليذها و يبطش
بيديها - فقالت له الحوت ان كنت صادقة فما لنا منها ملجأً لا
فى البر ولا فى البحر فافترقوا من هذه الوقت *

8. Translate into Arabic *any two* of the following :— 　20

    (a) Without a·doubt Ibrahim's carpets were the finest woven in Algiers.

His house was by no means so dim and dark as it looked from the outside.

No two carpets woven by Ibrahim were ever exactly alike.

Algiers has a delightful climate and tourists flock there to avoid the cold winters of the north.

    (b) He was only fourteen when his father died. The empire was ruled in his name by one of the ministers of his father. When he reached the age of eighteen, he took the management of the kingdom into his own hands. When he came to the throne the empire was very small. When he died he left to his successor a vast empire.

    (c) Life is but an empty dream.

        Fear of God is the beginning of wisdom.

        To rise early is beneficial to health.

        A desire to succeed often produces success.

        We ought to do as we are done by.

ARABIC.

Second Paper.

Examiner—Maulavi Md. Musa, B.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *any two* of the following into English :—   15

(a) فلما اراد الله ان يبعث ابراهيم حجة على خلقه و رسولا الى عباده و لم يكن فيما بينه و بين نوح نبي الا هود و صالح فلما تقارب زمان ابراهيم اتى اصحاب النجوم نمرود - فقالوا له انا نجد غلاما يولد في قريتك هذه يقال له ابراهيم - يفارق دينكم - و يكسر اصنامكم في شهر كذا من سنة كذا - فلما دخلت السنة التى ذكروا حبس نمرود الحبالى عنده الا ام ابراهيم - فانها لم يعلم بحبلها لانه لم يظهر عليها اثره فذبح كل غلام ولد فى ذلك الوقت - فلما وجدت ام ابراهيم الطلق خرجت ليلا الى مغارة كانت قريبا منها فولدت ابراهيم و اصلحت من شانه ما يصنع بالمولود *

(b) فلما رفعوه على راس الغيران رفع راسه الى السماء وقال اللهم انت الواحد فى السماء و انت الواحد فى الارض حسبى الله و نعم الوكيل و عرض له جبرئيل و هو يوثق فقال الك حاجة يا ابراهيم فقال اما اليك فلا - فقذفوه فى النار فناداها - فقال يا نار كونى بردا و سلاما على ابراهيم و قيل ناداها جبرئيل - فلولم يتبع بردها سلام لمات ابراهيم من شدة بردها - فلم يبق يومئذ نار الا طفئت ظننت انها هى *

(c) فجرد شهاب الدين من عسكره سبعين الفا و قال اريد
هذه الليلة تدورون حتى تكونوا وراء عسكر العدو - و عند
صلاة الصبح تاتون انتم من تلك الناحية وانا من هذه الناحية -
فغعلوا ذلك و طلع الفجر- و من عادة الهنود انهم لا يبرحون
من مضاجعهم الى ان تطلع الشمس - فلما اصبحوا حمل
عليهم عسكر المسلمين من كل جانب و ضربت، الكوسات فلم
يلتفت ملك الهند الى ذلك وقال من يقدم عليَّ انا هذا
و القتل قد كثر فى الهند و النصر قد ظهر للمسلمين *

2. (a) Point out all the proper names which are غير منصرف and   5
منصرف in the above extract (a) of Question 1. Give grammatical
reasons in each case.

   (b) Correct the following :—   5

فعل كتبا كثيرا فيها من دقيق الحيل - رغبت اليه
الملوك الذي كانوا فى ناحيته - جاء القوم الا زيدا - عندي
سبعين كتابا - ان فيه نفع *

Either,

   (c) Give the peculiarities of باب in the verbs underlined be-   5
low :—

إني استعذبت كلامك - فانه لا يزال يستذلهم و يستقلهم -
و الذي يستخرج السم من ناب الحية .... فليس الذنب
للحية - اخرج زيد كتابا *

Or,

Give the singular or plural of the following nouns :—

خرائق- مكايد • تمثال - ثور - محاسن - مساوي - فضلاء -
فواضل - مقادير- لوامع - حوافر- حيلة - غراب - زمان - دهر*

3. (a) Explain :—   10

فالحكمة كنز لا يفنى على انفاق - وذخيرة لا يقرب لها
بالاملاق - وحلة لا تخلق جدتها - ولذة لا تصرم مدتها - ولئن
كنت عند مقامي بين يدي الملوك امسكت عن ابتدائه
بالكلام فان ذلك لم يكن مني الا لهيبته والاجلال له ولعمري
ان الملوك لاهل ان يهابوا - لا سيما من هو فى المنزلة التى
حل فيها الملك من منازل الملوك قبله - وقد قالت العلماء
الزم السكوت فان فيه سلامة وتجنب الكلام الفارغ فان
عاقبته الندامة *

(b) Write short notes on—   10

تاج الدين - نمرود - برزويه - كليلة ودمنة *

4. Translate any two of the following into English :—

(a) قد قالت العلماء ونطقت الحكماء ان الدين بالملك   15
والملك بالجند والجند بالمال - والمال بعمارة البلاد - وعمارة
البلاد بالعدل فى العباد - فالملوك القدماء احترزوا عن الجور
والظلم لانهم علموا ان الرعية لا تثبت على الجور وان البلاد
والاماكن تخرب اذا استولى عليها الظالمون - ويتفرق اهلها
ويهربون الى ولايات غيرها - ويقع النقص فى الملك ويقل
فى البلاد الرجل وتخلو الخزائن من الاموال ويتكدر عيش الرعايا
لانهم لا يحبون ظالما ولا يزال دعاؤهم عليه متواترا - فلا يتمنع
الملك بمملكته *

(b) انه كان فى قديم الزمان ملك كثير الجند والاعوان   15
وصاحب جاه واموال ولكنه بلغه من العمر مدة ولم يرزق ولدا

ذكراً وكان ذلك سببا لملاله وفكره - فتوسل بالنبي صلى الله
عليه وسلم الى الله تعالى ان يرزقه بولد ذكر حتى يرث الملك
بعده - فسمع الله دعاءه ورزقه بولد ذكر فتربى ذلك الغلام الى
ان بلغ من العمر خمس سنين وكان عند ذلك الملك رجل
حكيم - معلّمه الحكمة والادب الى ان صار ذلك الولد كاملا
فى العلم والادب والفهم - فشكر الله ابوه لذلك وجعل ابنه
خادما للحرمين الشريفين زادهما الله شرفا فلما مات الملك
رجع الابن الى ملكه وصار خليفة لابيه *

(c) قال العامري (اسم رجل) اخبرني يا محمد الى ما تدعو؟   15
قال ادعو الى عبادة الله وحده لا شريك له وان لا تشرك بالله
وتومن بكتاب الله ورسوله وتصلي الصلوات الخمس وتصوم
شهر رمضان وتودي زكوة مالك وتحج البيت اذا وجدت اليه
سبيلا وتومن بالموت وبالبعث بعد الموت وبالجنة والنار -
قال العامري يا محمد فاذا فعلت ذلك فما لي - قال النبي
صلى الله عليه وسلم جنات عدن تجري من تحتها الانهار خالدين
فيها وذلك جزاء من تزكى *

5. Translate into Arabic either (*a*) or (*b*):—   20

(*a*) A lion, fatigued by the heat of a summer day, fell fast asleep
in his den. A mouse ran over his mane and ears and woke him from
his slumber. He rose up and shook himself in great wrath and
searched every corner of his den to find the mouse. A fox seeing
him said, ' A fine lion you are to be frightened of a mouse.'

(*b*) Contentment with our lot is an element of happiness. Know-
ledge is a great power. Act, but do not boast. Happy is the man
who learns from the misfortunes of others. Every one is more or
less master of his own fate. Do nothing without regard to the conse-
quences. One who is ungrateful to man is ungrateful to Allah.

PERSIAN.

Paper-setters—{ Z. R. Zahid Suhrawardy, Esq., M.A., B.L.
Maulavi Md. Musa, B.A.
Aga Kazim Shirazi.

FIRST PAPER.

Examiners—{ Khan Bahadur Maulavi Md. Ibrahim, B.A.
Maulavi Khalil Ahmed.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1.   Translate into English :—   10

طريدى بنـاورد زنگـي نمود * كه بر نقطـــه پرگار تنگي نمود

بچالشگري سوى او راندرخش * برابر سيه خنده زد چون درخش

چنـان زد برو ناچـــخ نه گره * كه هم كالبد سفتـه شد هم زره

بيك باد شد كشتى خصم خرد * فرومانـد لشكـــز پلنگـــربمرد

بفـــرمود شـــه از بربارگى * كه لشكـــر بجنبـــد بيكبارگى

سپاه از دو سو جنبش انگيختند * شب و روز با هـم در اميختند

زبيــم چقاچق كه آمد زتير * كفن گشت در زير جوش حرير

ترنگا ترنگ درخشنــده تيغ * ز مـاهي ورقهـــا بـراورد ميغ

With reference to the above context explain the following in Per-   4
sian or English :—

(a)   كه بر نقـطـــه پـرگار تنـگــــى نمود

(b)   كفــن گشـــت در زير جوش حرير

2.   Translate into English *any two* of the following quotations,   6
explaining the ideas contained in them :—

(a)   همـــه راه اگر نيست بيننـده كور

اديـم گو زنســت و كيمغــت گور

(b) درستــــی بــود زخمهـــا را بخــون

و لی زخمــگه مــــوی نـــاود برون

(c) از هر که بد آید طمــــع نیــک مدارید

خاصیـــــت کافور مجوئیـــد ز فلفل

3. Answer the following with reference to the above extracts in Questions 1 and 2:—

(a) Give the force of the final ی in the following words:—   3

طریدی - زنگی - چالشگری - بیکبارگی - تنگی - درستی

(b) Account for گان in گان.   What is the force of الف in   3
ناچخ نه گره Parse ؟ ترنگا ترنگ .

4. Answer *any one* of the following in your own Persian:—   6

(a) Write notes on دارا - سکندر - خاقان چین.

(b) Give the substance of نامهٔ سکندر بخاقان چین.

5. Translate into English:—   10

(a)   شب از بهــــر آسایش تســـت و روز

مه روشــــن و مــهــر گیتــــی وروز

هــــر از بــرای ســو مــراش وار

همــــی گستــــراند بســــاط بهـــار

اگر باد و برف ست و باران. و میـــغ

و گر رعـــد چوگان زنـد• بـــرق تیـــغ

همـــــه کارداران فرمانبــــرنـــد

که تخــــم تو در خاک می پرورند

(b)   چون بســوی کعبهٔ حاجات داری روی دل

حاجتـــی داریم حاجتمنــــد را حاجت برآر

هدهــــد• تاج کرامت بر سرت حال سبــا

گر مجالی باشدت پیـــش سلیمان عرضه دار

13

(c) باد او چون باد عیسیٰ دکلشــــا و روح بخش

آب او چـــون آب کوثرغـــم زدای و سازگار

(d) پندیکه بقـــول آیدت اول تو بفعـــل آر

ورنه نـــمـــود هیـــج موثر دم قائل

Explain the allusions contained in the lines commencing with **4**
باد او چون باد عیسیٰ and هدهدی تاج کرامت in the above extracts.

6. Answer *any one* of the following :— **4**

    (a) Mention with examples the various ways of forming تصغیر.

    (b) Give مضارع or حاصل مصدر of the following :—

انداختن – بالیدن – پختن – تافتن – چکیدن – دیدن – زدن – نمود

7. Translate into English :—

A.

فقالت البطة اعلمی ایها الطاؤسة انی فی هذه الجزیرة **20**

طول عمری آمنة لا اری مکروها - فنمت لیلة من للیالی

فرأیت فی منامی صورة ابن آدم وهو یخاطبنی و اخاطبه -

و سمعت قائلا یقول ایتها البطة احذری من ابن آدم ولا تغتری

بکلامه و لا بما یدخله علیک فانه کثیر الحیل و الخداع -

فالحذر کل الحذر من مکره - فانه متخادع ماکر - کما قال

فیه الشاعر *

یعطیـک مـــن طـــرف اللسـان حلاوة

و یـــروغ منـک کمــا یروغ الثعلـب

و اعلمی ان ابن آدم یحتال علی الحیتان فیخرجها من البحار

. و یری الطیر ببندقة من طین و یوقع الفیل بمکره - و ابن ادم

لا یسلم احد من شره - و لا ینجو منه طیر و لا وحش - وقد

بلغتك ما سمعته عن ابن ادم - فاستيقظت من منامي
خائفة مرعوبة *

B.

Either,

10   لان عنده شيئا يسميه الحزام فيشده على بطني - و شيئا
يسميه الظفر فيجعله تحت ذنبي - و شيئا يسميه اللجام
فيجعله في فمي - و يعمل لي منخاسا ينخسني به - و يكلفني
ما لا اطيق من الجري - و اذا عثرت لعذني - و اذا نهقت
شتمني - و بعد ذلك اذا كبرت و لم اقدر على الجري
يجعل لي رحلا من؟؛فتخشب *

Or,

و قال بلسان فصيح ايها الملك الجليل صاحب الباع الطويل -
اسعد لله مساءك و مسعاك - و زاد في شجاعتك و قواك -
اجرني مما دهاني - و بشره رماني - لاني ما وجدت لي
نصيرا غيرك - ثم ان النجار وقف بين يدي الاسد - و بكى
و اشتكى - فلما سمع الشبل بكاءه و شكواه - قال له اجرتك
مما تخشاه *

8.   Answer *any two* of the following: —   **8**

(*a*) Rewrite *any one* of the extracts in Question 7 (*b*) with vowel-points.

(*b*) Account for إعراب of the following words with reference to the extracts in Question 7:—

طولَ - قائلاً - الطيرَ - مرعوبةٌ ؛ فصيحٍ - الجليلُ - نصيراً -
منخاساً *

(*c*) Analyze:—ويروغ منك كما يروغ الثعلب .

9. (*a*) How is امر حاضر معروف formed in Arabic ? Inflect the same   **6**
from تعود or نكرم . Give vowel-points also.

(*b*) Inflect نأم or بكى from ابن or لم with مضارع معروف   **4**

(*c*) Enumerate افجال المدح و الذم or افعال القلوب .   **2**

PERSIAN.

SECOND PAPER.

Examiners— { MAULAVI MD. IRFAN, M.A.
{ MAULAVI ABDULLA ABU SAYED.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English :—
         10

در اخبار آمده که خسرو پرویز را سپه سالاری بود به لشکر

کشی و دشمن کشي معروف و مذکور و بمتانت رای و وقوف

عزم در اطراف مملکت موصوف و مشهور مقرب ملک و عمدهٔ

ممالک بودی و خسرو پرویز از صواب دید او عدول ننمودی

وقتی صاحب خبران بسمع ملک رسانیدند که سپه سالار شما از

جادهٔ فرمانبرداري انحراف خواهد ورزید و سبیل عناد و عصیان

و طریق سرکشي و طغیان مسلوک خواهد داشت پیش از ان

که آنصورت از قوّه بفعل آید بتدارک آن اشتغال باید نمود

خسرو ازین خبر اندیشه مند شد و گفت اگر او عنان عزیمت

از روی مخالفت بطرفی از اطراف مملکت بگرداند بسیاری

از اعیان لشکر و سران سپاه با او راه موافقت پیش گیرند و یمکن

که از آوازهٔ بلغی شدن او قصوری در ارکان ملک پدید آید و از

دبدبهٔ طاغی گشتن او فتوری بقواعد سلطنت راه یابد ٭

2. (a) Derive and give the root meanings of *any six* of the follow-
ing words :—
         6

انحراف - مقرب - موصوف - متانت - معروف - عصیان -

مشهور - موافقت - مسلوک ٭

(b) Explain the forms of *any four* of the following and give the   4
meanings of their component parts:—

شورستان - متغير اللون - دار الخلافة - بیچارگی - فراغ بال -
فرزتنی - کریه الرایحه *

3. Translate into English :—

A.   16

مانی از ترس شاپور از ایران گریخت بعقیدهٔ بعضی از مورخین
از راه کشمیر عازم بلاد هند گردید و از آنجا بترکستان و ختا رخت
کشید و کار او در آنحدود بالا گرفت و در اثنای سیر غاری در کوهی
دید با فضا و هوای خوش و چشمهٔ آب قوت یکساله بدان غار
برد و مریدها را گفت من به آسمان عروج میکنم و یکسال
میمانم پس از این مدت در حوالی فلان غار منتظر من شوید
این بگفت و بغار رفته در اوان عزلت نقشهای بدیع در لوحی
یا کتابی ساخت و ارژنگ مانی اسم آن نقشها ست چون
سال بسر رسید و از غار بیرون آمد آن تصاویر را معجز خود قرار
داد و گفت این بدایع را از آسمان آورده ام جمعی از دیدن آن
صور حیرت کرده. بمانی ایمان آوردند و او با جماعتی از پیروان
خود بایران مراجعت نمود و با بهرام ملاقات کرد و او را بدین
خود خواند *

B.   14

بسی صورت بگردیده است عالم
ازینصورت بگردد عاقبت هم
عمارت در سرای دیگر انداز
که دنیا را اساسی نیست محکم
مثال همر سر بر کرده شمعی است
که کوته باز میگردد دم سادم

و یا برف گـــدازان بر ســـر کوه

کزو هر لحظه جزوی میشود کم

نه چشـــم طامع از دنیا شود سیر

نه هرگز چـــاه پر گردد بشبنـــم

بسیم و زر نکـــو نامی بدست آر

مذه برهم که بر گیـــرندش از هم

فریدون را ســـر امد پادشاهی

سلیمان را برفت از دست خاتم

4. Translate into Persian :—

50

A.

A few miles from Amsterdam there is a little town called Saardam. Here people used to build a great many ships. More than a hundred years ago, there were a great many carpenters at work at the ships in Saardam. Among the rest was one called Master Peter. Who do you think this Master Peter was ? I will tell you. He was the Emperor of Russia. When the other carpenters found out that Master Peter was an Emperor, they were very much surprised, and wondered that he should be there at work as a carpenter. ' I will tell you the whole story,' said Peter. ' I am the Emperor of Russia. My people are ignorant, they do not know how to build ships. I have come here to learn how to build ships; and when I have learnt that, I shall go back and teach my people how to build ships.' He also taught them many other things.

B.

(*a*) I am not angry with you. But you should not have gone there. It is against orders.

(*b*) I will give you Rs. 10 as an advance. I will cut Rs. 2/8 0 every month from your pay until the Rs. 10 are paid up.

(*c*) I am very glad to see you. Please sit down. Are you very well ? I have not seen you for a long time.

(*d*) The river is in flood, Can one cross over on foot ? Is it possible to get timber there with which to make a bridge ?

GREEK.

Paper-setters— { REV. DR. G. HOWELLS, M.A.; PH.D.
{ REV. A. B. JOHNSTON. M.A.

FIRST PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate the following passages:—

(a) Περὶ μὲν οὖν ὧν οἱ πρῶτοί μου κατήγοροι κατηγόρουν αὕτη   10
ἐστὶν ἱκανὴ ἀπολογία πρὸς ὑμᾶς· πρὸς δὲ Μέλητον τὸν ἀγαθόν τε καὶ
φιλόπολιν, ὥς φησι, καὶ τοὺς ὑστέρους μετὰ ταῦτα πειράσομαι ἀπολο-
γεῖσθαι. αὖθις γὰρ δή, ὥσπερ ἑτέρων τούτων ὄντων κατηγόρων,
λάβωμεν αὖ τὴν τούτων ἀντωμοσίαν. ἔχει δέ πως ὧδε· Σωκράτη
φησὶν ἀδικεῖν τούς τε νέους διαφθείροντα καὶ θεοὺς οὓς ἡ πόλις νομίζει
οὐ νομίζοντα, ἕτερα δὲ δαιμόνια καινά. τὸ μὲν δὴ ἔγκλημα τοιοῦτόν
ἐστιν. τούτου δὲ τοῦ ἐγκλήματος ἓν ἕκαστον ἐξετάσωμεν. φησὶ γὰρ
δὴ τοὺς νέους ἀδικεῖν με διαφθείροντα. ἐγὼ δέ γε, ὦ ἄνδρες Ἀθηναῖοι,
ἀδικεῖν φημι Μέλητον, ὅτι σπουδῇ χαριεντίζεται ῥαδίως εἰς ἀγῶνα
καθιστὰς ἀνθρώπους, περὶ πραγμάτων προσποιούμενος σπουδάζειν καὶ
κήδεσθαι ὧν οὐδὲν τούτῳ πώποτε ἐμέλησεν. ὡς δὲ τοῦτο οὕτως ἔχει
πειράσομαι καὶ ὑμῖν ἐπιδεῖξαι.

(b) Ὡς δὲ τά τε τῶν γεφυρέων κατεσκεύαστο, καὶ τὰ περὶ τὸν   10
Ἄθων, οἵ τε χυτοὶ περὶ τὰ στόματα τῆς διώρυχος, οἳ τῆς ῥηχίης εἵνεκεν
ἐποιήθησαν, ἵνα μὴ πίμπληται τὰ στόματα τοῦ ὀρύγματος, καὶ αὐτὴ
ἡ διῶρυξ παντελέως πεποιημένη ἄγγελτο· ἐνθαῦτα χειμερίσας, ἅμα τῷ
ἔαρι παρεσκευασμένος ὁ στρατὸς ἐκ τῶν Σαρδίων ὡρμᾶτο ἐλῶν ἐς
Ἄβυδον. Ὡρμημένῳ δέ οἱ ὁ ἥλιος ἐκλιπὼν τὴν ἐκ τοῦ οὐρανοῦ ἕδρην,
ἀφανὴς ἦν, οὔτ' ἐπινεφέλων ἐόντων, αἰθρίης τε τὰ μάλιστα· ἀντὶ ἡμέρης
τε νὺξ ἐγένετο. Ἰδόντι δὲ καὶ μαθόντι τοῦτο τῷ Ξέρξῃ ἐπιμελὲς
ἐγένετο· καὶ εἴρετο τοὺς μάγους τὸ θέλει προφαίνειν τὸ φάσμα. οἱ δὲ
ἔφραζον ὡς "Ἕλλησι προδεικνύει ὁ θεὸς ἔκλειψιν τῶν πολίων."
λέγοντες "ἥλιον εἶναι Ἑλλήνων προδέκτορα, σελήνην δὲ σφέων."
πυθόμενος δὲ ταῦτα Ξέρξης, περιχαρὴς ἐὼν ἐποιέετο τὴν ἔλασιν.

(c) Ὡς ἄρα φωνήσας ἵμασεν καλλίτριχας ἵππους,   10
ἵκετο δ' εἰς Αἰγάς, ὅθι οἱ κλυτὰ δώματ' ἔασιν.
αὐτὰρ Ἀθηναίη κούρη Διὸς ἄλλ' ἐνόησεν·
ἦ τοι τῶν ἄλλων ἀνέμων κατέδησε κελεύθους,
παύσασθαι δ' ἐκέλευσε καὶ εὐνηθῆναι ἅπαντας.
ὦρσε δ' ἐπὶ κραιπνὸν βορέην πρὸ δὲ κύματ' ἔαξεν,
ἕως ὅ γε Φαιήκεσσι φιληρέτμοισι μιγείη
διογενὴς Ὀδυσεὺς θάνατον καὶ κῆρας ἀλύξας.

(d) Ὡς ἔφατ’, αἴδετο γὰρ θαλερὸν γάμον ἐξονομῆναι   10
    πατρὶ φίλῳ· ὁ δὲ πάντα νόει καὶ ἀμείβετο μύθῳ·
    " Οὔτε τοι ἡμιόνων φθονέω, τέκος, οὔτε τευ ἄλλου.
    ἔρχευ· ἀτάρ τοι δμῶες ἐφοπλίσσουσιν ἀπήνην
    ὑψηλὴν εὔκυκλον, ὑπερτερίῃ ἀραρυῖαν."

2. Write explanatory and grammatical notes on passages (a) and   20
(c) given above.   Parse the more difficult forms.

3. Give a critical estimate of the contents and form of Plato's   10
Apology of Socrates.   *Either,*

4. Review the contents of Herodotus, Book VII, and indicate the   10
merits of Herodotus as a historian.

Or,

Give an account and write an estimate of the more important
characters brought to our notice in the *Odyssey,* Books V and VI.

5. 'Conditional sentences in Greek have six forms—four of ordi-10
nary conditions, and two of present and past general suppositions.'
Expand this statement and give illustrative examples.

6. Give with examples the uses of—παρά, περί, πρός, and ὑπό.   10

GREEK.

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into Greek :—   16
    (a) If I know neither what is holy nor what is just, do you teach
me as quickly as possible.
    (b) They sent envoys to Sparta to say this and to ask for
Lysander.
    (c) If these men accomplished what secured your great advan-
tage, I might justly claim not the least share of the merit.
    (d) I opposed you that you should do nothing contrary to the
laws.

2. Translate into Greek :—   14
When the news came that the generals had been ambushed and
slain, the majority of the troops almost despaired. 'Never again,'
they cried, ' shall we see our dear motherland.' But one officer was
made of the invincible spirit that won the battle of Marathon. He
called the other captains together, addressed them, and inspired them
with hope—the key to victory. Is there a land that has not heard
his name ?

3. Translate into English :—

    (a)   The Righteous Man.   20

        Ἀνὴρ δίκαιός ἐστιν οὐχ ὁ μὴ ἀδικῶν,
        ἀλλ’ ὅστις ἀδικεῖν δυνάμενος μὴ βούλεται.

οὐδ' ὃς τὰ μικρὰ λαμβάνειν ἀπέσχετο,
ἀλλ' ὃς τὰ μεγάλα καρτερεῖ μὴ λαμβάνων,
ἔχειν δυνάμενος καὶ κρατεῖν ἀζημίως·
οὐδ' ὅς γε ταῦτα πάντα διατηρεῖ μόνον,
. ἀλλ' ὅστις ἄδολον γνησίαν τ' ἔχων φύσιν
. εἶναι δίκαιος κοὐ δοκεῖν εἶναι θέλει.

(b) Μετὰ δὲ ταῦτα καὶ οἱ Ἀθηναῖοι ἐκ τοῦ Νοτίου καθελκύσαντες   25
τὰς λοιπὰς τριήρεις ἀνήχθησαν, ὡς ἕκαστος ἤνοιξεν. ἐκ τούτου δ'
ἐναυμόχησαν οἱ μὲν ἐν τάξει, οἱ δὲ Ἀθηναῖοι διεσπαρμέναις ταῖς ναυσί,
μέχρι οὖ ἔφυγον ἀπολέσαντες πεντεκαίδεκα τριήρεις. τῶν δὲ ἀνδρῶν
οἱ μὲν πλεῖστοι ἐξέφυγον, οἱ δ' ἐζωγρήθησαν. Λύσανδρος δὲ τάς τε
ναῦς ἀναλαβὼν καὶ τρόπαιον στήσας ἐπὶ τοῦ Νοτίου διέπλευσεν εἰς
Ἔφεσον, οἱ δὲ Ἀθηναῖοι εἰς Σάμον.

(c)   *Prometheus to Oceanus.*   25

Τὰ μέν δ' ἐπαινῶ κοὐδαμῶς λήξω ποτέ·
προθυμίας γὰρ οὐδὲν ἐλλείπεις.   ἀτὰρ
μηδὲν πόνει· μάτην γὰρ οὐδὲν ὠφελῶν
ἐμοὶ πονήσεις, εἴ τι καὶ πονεῖν θέλεις.
ἀλλ' ἡσύχαζε σαυτὸν ἐκποδὼν ἔχων·
ἐγὼ γὰρ οὐκ, εἰ δυστυχῶ, τοῦδ' εἵνεκα
θέλοιμ' ἂν ὡς πλείστοισι πημονὰς τυχεῖν.

LATIN.

Paper-setters— { A. D. KEITH, ESQ., M.A.
                { G. H. LUCE, ESQ., M.A.

FIRST PAPER.

Examiner—W. G. FRASER, ESQ.

*Candidates·are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

GROUP A.

Answer question 1 and EITHER question 2 OR question 3.

1. Translate into English, adding notes where necessary :—   15
    (a)   Quid sit futurum cras fuge quaerere et
               quem Fors dierum cumque dabit lucro
               appone, nec dulcis amores
                   sperne puer neque tu choreas.
           donec virenti canities abest
           morosa.   nunc et campus et areae
               lenesque sub noctem susurri
                   composita repetantur hora,

nunc et latentis proditor intimo
gratus puellae risus ab angulo
    pignusque dereptum lacertis
    aut digito male pertinaci.

(b)   Omnes eodem cogimur, omnium
versatur urna serius ocius
sors exitura et nos in aeternum
    exsilium impositura cumbae.

(c)   Quid brevi fortes iaculamur aevo
multa ? quid terras alio calentis
sole mutamus ? patriae quis exsul
    se quoque fugit ?
laetus in praesens animus quod ultra est
oderit curare et amara lento
temperet risu ; nihil est ab omni
    parte beatum.

2. What do you gather from the *Odes* of Horace's life and philoso-   12
phy ?

3. Explain the following allusions :—   12

(a)   ━ ᴄ   Age dic Latinum,
barbite, carmen,
Lesbio primum modulate civi.

(b)   Invidens
privata deduci superbo
non humilis mulier triumpho.

(c)   Ne relictis, Musa procax, iocis,
Ceae retractes munera neniae.

(d)   ⸰ Philippos et celerem fugam
sensi relicta non bene parmula.

GROUP B.

Answer question 4 and EITHER *question 5 or question 6.*

4. Translate into English :—   ⸰   15
(a) Tu vero adscribe me talem in numerum. Sed unam rem
vereor ne non probes. Si enim fuissem, non solum regem, sed etiam
regnum de re publica sustulissem ; et si theus stilus ille fuisset, ut
dicitur, mihi crede, non solum unum actum, sed totam fabulam con-
fecissem.
Explain the point and context of this passage.

(b) Fuit in illo ingenium, ratio, memoria, litterae, cura, cogitatio,
diligentia ; res bello gesserat quamvis rei publicae calamitosas, at
tamen magnas ; multos annos regnare meditatus, magno labore,
multis periculis quod cogitarat effecerat ; muneribus, monimentis,
congiariis, epulis multitudinem inperitam delenierat ; suos praemiis,
adversarios clementiae specie devinxerat : quid multa ? attulerat
iam liberae civitati partim metu, partim patientia consuetudinem
serviendi.
Give a short account of the person here referred to.

5. What were the consequences of the assassination of Julius   12
Caesar ?

6. Write a short note on—*nundinae ; mediusfidius ; intercessio ;*   12
flamen ; illud Cassianum, cui bono fuerit ; cedant arma togae.

GROUP C.

All questions to be answered.

7. Translate :—   15

Romae interim satis iam omnibus, ut in tali re, ad tuendam arcem compositis, turba seniorum domos regressi adventum hostium obstinato·ad mortem animo exspectabant. Qui eorum curules gesserant magistratus, ut in fortunae pristinae honorumque aut virtutis insignibus morerentur, quae augustissima vestis est tensas ducentibus triumphantibusve, ea vestiti medio aedium eburneis sellis sedere. Galli et quia interposita nocte a contentione pugnae remiserant animos et quod nec in acie ancipiti usquam certaverunt proelio nec tum impetu aut vi capiebant urbem, sine ira, sine ardore animorum ingressi postero die urbem patente Collina porta in forum perveniunt ; ubi eos, plebis aedificiis obseratis, patentibus atriis principum, maior prope cunctatio tenebat aperta quam clausa invadendi ; adeo haud secus quam venerabundi intuebantur in aedium vestibulis sedentes viros, praeter ornatum habitumque humano augustiorem, maiestate etiam quam voltus gravitasque oris prae se ferebat simillimos dis. Ad eos velut simulacra versi cum starent, M. Papirius, unus ex iis, dicitur Gallo barbam suam, ut tum omnibus promissa erat, permulcenti scipione eburneo in caput incusso iram movisse, atque ab eo initium caedis ortum, ceteros in sedibus suis trucidatos.

8. (*a*) Give the chief uses of the ablative case.   15

    (*b*) Illustrate the chief uses of *ut.*

    (*c*) Give the chief rules for the comparison of adjectives.

9. (*a*) Explain the history of the relations between the Patricians,   16 Tribunes, and Plebeians.

    (*b*) Illustrate with the help of a map the development of Roman conquest and the invasion of the Gauls, as recorded in Livy, Book V.

LATIN.

SECOND PAPER.

*Examiner—*J. W. HOLME, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate the following :—   30

(*a*) Sed iam satis multa de causa, extra causam etiam nimis fortasse multa. Quid restat nisi ut orem obtesterque vos, iudices, ut eam misericordiam tribuatis fortissimo viro quam ipse non implorat, ego etiam repugnante hoc et imploro ·et exposco ? Nolite, si in nostro omnium fletu nullam lacrimam adspexistis Milonis, si voltum semper eundem, si vocem, si orationem stabilem ac non mutatam videtis, hoc minus et parcere ; haud scio an multo sit etiam adiuvandus magis. Etenim si in gladiatoriis pugnis et in infimi generis hominum conditione atque fortuna timidos atque supplices et ut vivere liceat obsecrantis etiam odisse solemus, fortis

atque animosos et se acriter ipsos morti offerentis servare cupimus, eorumque nos magis miseret qui nostram misericordiam non requirunt quam qui illam efflagitant, quanto hoc magis in fortissimis civibus facere debemus. Me quidem, iudices, exanimant et interimunt hae voces Milonis quas audio assidue et quibus intersum cotidie. ' Valeant,' inquit, ' valeant cives mei ; sint incolumes, sint florentes, sint beati ; stet haec urbs praeclara mihique patria carissima quoquo modo erit merita de me ; tranquilla re publica mei cives, quoniam mihi cum illis non licet, sine me ipsi sed propter me tamen perfruantur.'

(b)   *Either,*   30

  Turnus, ut Aenean cedentem ex agmine vidit
  turbatosque duces, subita spe fervidus ardet ;
  poscit equos atque arma simul, saltuque superbus
  emicat in currum, et manibus molitur habenas.
  Multa virum volitans dat fortia corpora leto ;
  semineces volvit multos, aut agmina curru
  proterit aut raptas fugientibus ingerit hastas.
  Qualis apud gelidi cum flumina concitus Hebri
  sanguineus Mavors clipeo increpat atque furentes
  bella movens immittit equos ; illi aequore aperto
  ante Notos Zephyrumque volant ; gemit ultima pulsu
  Thraca pedum ; circumque atreae Formidinis ora,
  Iraeque, Insidiaeque, dei comitatus aguntur ;
  talis equos alacer media inter proelia Turnus
  fumantes sudore quatit, miserabile caesis
   hostibus insultans.   *Or,*

At sunt morosi et anxii et iracundi et difficiles senes. Si quaerimus, etiam avari ; sed haec morum vitia sunt, non senectutis. Ac morositas tamen et ea vitia, quae dixi, habent aliquid excusationis, non illius quidem iustae, sed quae probari posse videatur ; contemni se putant, despici, illudi ; praeterea in fragili corpore odiosa omnis offensio est ; quae tamen omnia dulciora fiunt et moribus bonis et artibus, idque cum in vita tum in scaena intellegi potest ex eis fratribus qui in Adelphis * sunt. Quanta in altero diritas, in altero comitas ! Sic se res habet ; ut non omne vinum sic non omnis natura vetustate coacescit. Severitatem in senectute probo, sed eam, sicut alia, modicam ; acerbitatem nullo modo ; avaritia vero senilis quid sibi velit, non intelligo.

    * *Adelphi,* ' the Brothers ', name of a play.

 2. Translate into Latin :—   15
  (a) A decree of the Senate was passed that the tribunes should call a meeting and express their thanks to the knights.
  (b) The sedition in the city came nigh to extending to the army.
  (c) He sent a letter to the Senate stating that Veii was on the point of capitulating, and asking what they thought ought to be done with the booty.
  (d) May you all of you prove successful.
  (e) There is no doubt that if a woman had not acted a man's part that day all would have been lost.

 3. Translate into Latin :—   25
  Caesar foresaw that if the enemy were defeated in the first onslaught they would retreat so rapidly as to make it impossible for his more heavily armed soldiers to come up with them. For this reason he did not attack that afternoon. During the night he sent

large bodies of troops across the river to surround the enemy. Elated by the thought of victory the enemy spent the night feasting and drinking while the minstrels sang songs celebrating the great victory which they were going to win the next day. In the meanwhile the men whom Caesar had sent to surround the enemy crossed the river unseen, and marching all night in silence, hidden from sight by the range of low hills on either flank of the enemy, had by the time the dawn broke completely surrounded the enemy. About an hour after dawn Caesar, having received information that the enemy could no longer escape by running away, attacked with all his forces The battle was short but fierce. The enemy turning to flee found that in whatever direction they went there were Roman soldiers opposing their flight. Very few of the fugitives escaped through the ranks of the legionaries. The rest were either killed or made prisoners.

FRENCH.

Paper-setters—{ REV. FATHER E. FRANCOTTE, S.J.
{ T. S. STERLING, ESQ., M.A.

FIRST PAPER.

Examiner—REV. FATHER E. FRANCOTTE, S.J.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *our* of the five following passages :—   16

(a) On comprend *très-bien* tout de suite quel entretien Tartuffe a eu avec Orgon, quel enseignement il lui a donné. *Son* but étant d'accaparer Orgon et pour ainsi dire de le monopoliser, il lui a persuadé que Dieu ne veut d'attachement qu'à lui, et c'était pour amener Orgon à n'avoir d'attachement qu'à lui Tartuffe. Il a réussi si bien qu'Orgon s'imagine—car il n'en est pas encore *là*—n'avoir plus de liens avec la terre et être tout en Dieu, et c'est à dire tout en Tartuffe, qui est pour lui le représentant du ciel. Cléante s'écrie,, véritablement effrayé : ' Les sentiments humains, mon frère, que voilà ! '

(b) Cependant le nombre des pauvres *s'augmentait* sans fin par le luxe, par les débauches et par la fainéantise qui s'introduisait. Ceux qui se voyaient ruinés n'avaient *de* ressource que dans les séditions, et en tout cas se souciaient peu que tout pérît après eux. *On* sait que c'est ce qui fit la conjuration de Catilina. Les grands ambitieux et les misérables qui n'ont rien à perdre aiment toujours le changement. Ainsi finit la République romaine, qui est un grand enseignement, autant par ce qui a fait sa grandeur et qu'il convient qu'on imite, que par ce qui l'a ruinée et qu'il faut qu'on évite de toute énergie et de toute constance.

(c) Au nord du château s'étendait une lande semée de pierres druidiques ; j'allais m'asseoir sur une de ces pierres au soleil couchant. La cime dorée du bois, la splendeur de la terre, l'étoile du soir scintillant à travers les nuages de *rose* me ramenaient à mes

songes ; j'aurais voulu jouir de ce spectacle avec l'idéal objet de mes désirs . . . Le vent du soir qui brisait les réseaux tendus *par* l'insecte sur la pointe des herbes, l'alouette de bruyère qui se posait sur un caillou *me* rappelaient à la réalité ; je reprenais le chemin du manoir, le cœur serré. le visage abattu.

(*d*) *A poignées* n'est pas ostentatoire, n'indique pas la prodigalité. S'il indiquait la prodigalité il *serait* impropre, car le semeur set *tout* le contraire d'un prodigue. Mais le semeur est vieux, savant dans son métier, expert, et il prend le grain à poignées pleines, dans son sac, pour ne pas faire deux mouvements quand il n'en faut qu'un, pour faire l'économie d'un mouvement, pour ne pas perdre de temps ; sûr, du reste, parce qu'il sait semer, de jeter le grain avec assez d'adresse pour qu'il soit convenablement dispersé et disséminé. L'art de semer est là. Il n'est inconnu ni du paysan ni de Victor Hugo.

(*e*) La vieille demoiselle Michonneau gardait sur ses yeux fatigués un crasseux abat-jour en taffetas *vert*, cerclé par du fil d'archal qui aurait effarouché l'ange de la pitié. Son châle à franges maigres et pleurardes semblait couvrir un squelette, tant les formes *qu'*il couvrait étaient anguleuses. Quel acide avait dépouillé cette créature de ses formes féminines ? Elle devait avoir été jolie et bien faite. Étaitce le vice, le chagrin ou la cupidité ? Avait-elle trop aimé, avait-elle été marchande à la toilette ou seulement courtisane ? Son regard blanc donnait froid, sa figure *rabougrie* menaçait. Elle avait la voix clairette d'une cigale, criant dans son buisson à l'approche de l'hiver.

2. Translate idiomatically *three* of the four following passages :—

(*a*) *Cinna.*   Jamais contre un tyran entreprise conçue
           Ne permit d'espérer une si belle issue :
           . Jamais de telle ardeur on n'en jura la mort,
           Et jamais conjurés ne furent mieux d'accord ;
           Tous s'y montrent portés avec tant d'allégresse,
           Qu'ils semblent, comme moi, servir une maîtresse :
           Et tous font éclater un si puissant courroux,
           Qu'ils semblent tous venger père, comme vous

(*b*) *Maxime.* Quel est votre dessein après ces beaux discours ?
    Cinna.   Le même que j'avais, et que j'aurai toujours.
    Maxime. Un chef de conjurés flatte la tyrannie !
    Cinna.   Un chef de conjurés veut la voir impunie !
    Maxime. Je veux voir Rome libre. *Cinna.* Et vous pouvez
             juger
           Que je veux l'affranchir ensemble et la venger.
           Octave aura donc vu ses fureurs assouvies,
           Pillé jusqu'aux autels, sacrifié nos vies, . . . !

(*c*) *Fulvie.*   Vous avez mis son âme au désespoir.
    Émilie.   Qu'il cesse de m'aimer, ou suive son devoir.
    Fulvie.   Il va vous obéir aux dépens de sa vie :
           Vous en pleurez ! *Émilie.* Hélas, cours après lui,
             Fulvie ;
           Et si ton amitié daigne me secourir,
           Arrache-lui du cœur ce dessein de mourir :
           Dis-lui . . . *Fulvie.* Qu'en sa faveur vous laissez
             vivre Auguste ?

    Émilie.   Ah ! c'est faire à ma haine une loi trop injuste.
    Fulvie.   Et quoi donc ? *Émilie.* Qu'il achève, et dégage
            sa foi,
           Et qu'il choisisse après de la mort, ou de moi.

(d) *Auguste.* Prends un siége, Cinna, prends, et sur toute chose
Observe exactement la loi que je t'impose :
Prête, sans me troubler, l'oreille à mes discours ;
D'aucun mot, d'aucum cri, n'en interromps le
cours ;
Tiens ta langue captive, et, si ce grand silence
A ton émotion fait quelque violence,
Tu pourras me répondre après tout à loisir :
Sur ce point seulement contente mon désir,

3. (a) Parse fully *six* of the words italicised in Question 1.   6

(b) Give the principal parts (*temps primiti/s*) of : *périr, savoir,*   8
faire. falloir, aller, s'asseoir, prendre, être. N.B. —Give only the first
person singular for finite tenses.

(c) Write synonyms for :—*couchant, cime, songes, manoir* (1, c) ;   4
tout de suite (1, a) ; *fainéantise* (1, b) ; *sûr, expert* (1, d).

4. (a) In 1, a write in full the *clause* embodied in the single word   3
là.

(b) What exactly does Cléante mean in the last clause of 1, a :   4
' Les sentiments humains, mon frère, que voilà ' !

(c) What was, in your opinion, the chief purpose of É. Faguet   3
' Ce que disent les livres ' ?

(d) Who are the respective authors of 1. c and 1, e ? What do   5
you know about them, either from the context, or from other
sources ?

5. (a) Scan the sixth line of 2, d, separating *each* foot by a vertical   2
line.

(b) Parse fully :—*vous* (2, c. *Fulvie.* Il va *vous* obéir) and *après*   2
(last line of 2, c).

(c) Distinguish between :—*toucher à, toucher ; le précepteur, le*   2
percepteur ; des exemples fameux, de fameux exemples ; un triste
enfant, un enfant triste.

(d) Supply the blanks in the following :—Cette suite des empires,   4
même à—considérer plus humainement, a—grandes utilités. Quand
vous voyez passer comme—un instant devant vos yeux, je ne dis pas
les rois et—empereurs ... Il n'est point arrivé—grands changements
qui—ait eu ses causes dans—siècles précédents. Les prairies ne sont
plus blanches—givre. Une blancheur maladive semblable—celle—
jeunes filles attaquées de chlorose.

(e) Condense into not more than *two* lines of French prose the   2
passage 2, d spoken by Auguste.

6. Turn into idiomatic French *two* of the following passages :—   30

. (a) Our next business, I think, should be to treat of pleasure.
For pleasure seems, more than anything else, to have an intimate
connection with our nature ; which is the reason why, in educating
the young, we use pleasure and pain as the rudders of their course.

(b) The most considerable and the most general changes upon
the surface of the earth are provoked by rains, rivers, and torrents
from the mountains. These derive their origin from vapours which
the sun draws up from the surface of the seas, and which the winds
carry to every region of the earth.

(c) Let us remember that this long chain of particular causes,
which raises and destroys empires, depends on the secret decrees of
Divine Providence. God, from the highest heaven, holds the reins
of all the kingdoms upon earth. All hearts are in his hand. He
sometimes restrains the passions of men, at other times he lets them
loose ...

FRENCH.

Second Paper.

Examiner—T. S. Sterling, Esq., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English *seven* of the following passages :—   70

  (*a*) Maintenant que Paris, ses pavés et ses marbres,
      Et sa brume et ses toits sont bien loin de mes yeux ;
      Maintenant que je suis sous les branches des arbres,
      Et que je puis songer à la beauté des cieux ;
      Maintenant que du deuil qui m'a fait l'âme obscure
        Je sors, pâle et vainqueur,
      Et que je sens la paix de la grande nature
        Qui m'entre dans le cœur . . .

  (*b*) Quel charme vainqueur du monde
      Vers Dieu m'élève aujourd hui ?
      Malheureux l'homme qui fonde
      Sur les hommes son appui !
      Leur gloire fuit et s'efface
      En moins de temps que la trace
      Du vaisseau qui fend les mers,
      Ou de la flèche rapide
      Qui, loin de l'œil qui la guide,
      Cherche l'oiseau dans les airs.

  (*c*)   *La Mort d'un Chêne.*
      Quand l'homme te frappa de la lâche cognée,
      O roi qu'hier le mont portait avec orgueil,
      Mon âme au premier coup retentit indignée,
      Et dans la forêt sainte il se fit un grand deuil.
      Un murmure éclata sous ses ombres paisibles :
      J'entendis des sanglots et des bruits menaçants ;
      Je vis errer des bois les hotes invisibles,
      Pour te défendre, hélas ! contre l'homme impuissants.

  (*d*) C'est à toi qu'il convient d'ouïr les grandes plaintes
      Que l'humanité triste exhale sourdement.
      Quand le cœur est gonflé d'indignations saintes,
      L'air des cités l'étouffe à chaque battement.
      Mais de loin les soupirs des tourmentes civiles,
      S'unissant au-dessus du charbon noir des villes,
      Ne forment qu'un grand mot qu'on entend clairement.

  (*e*) La lecture est le remède souverain à la stérilité d'esprit. Par
elle il s'ouvre, se remplit ; tout le monde moral et physique trouve
un accès en lui. Pour apprendre à écrire surtout, il faut lire : c'est
ainsi qu'on recueille des idées pour les exprimer à son tour. Parfois,
quand on est jeune, on se pique d'originalité et l'on prétend penser
des choses qu'aucune intelligence humaine n'ait encore pensées. Les
idées neuves sont rares en ce monde : on pourrait n'en pas rencontrer
une seule dans l'œuvre de plus d'un grand écrivain, qui n'en vaut
pas moins

(*f*) Penser, c'est réfléchir, méditer, et s'entretenir avec soi-même : pour faire chacune de ces actions il est nécessaire de faire un effort de nos facultés mentales   Réfléchir, c'est peser un argument dans notre esprit, de même manière et pour le même but que nous pesons sur les balances quelque article pour en définir le poids.   Méditer, c'est devenir susceptible d'envisager les sujets.   S'entretenir avec soimême, c'est avoir une conversation avec soi-même, une causerie paisible et calme avec notre âme

(*g*) Ne surcharge pas ta mémoire comme pour faire un esclave d'un si fidèle serviteur. Souviens-toi qu'Atlas était fatigué. Aie donc autant de raison qu'un chameau, pour te lever quand tu as ton plein fardeau.   La mémoire, pareille à une bourse, si elle est trop emplie et ne se peut fermer, tout tombera dehors ; prends garde à une curiosité gloutonne, qui veut se nourrir de maintes choses, de peur que l'avidité de l'appétit de ta mémoire n'en gâte la digestion.

(*h*) Par le moyen de cette lettre et des autres que je vous ai déjà envoyées, vous serez d'abord si bien introduit dans la meilleure société française, que vous auriez de la peine à en voir une mauvaise ; mais ce n'est pas ce que je crains de votre part ; vous avez, j'en suis sûr, une ambition trop haute pour préférer une compagnie méprisable et déshonorante à celle de vos supérieurs par le rang et par l'âge.

2. Translate into French *three* of the following passages :—   30

(*a*) There is no wealth but life—life, including all its powers of love, of joy, and of admiration. That country *is* the richest which nourishes the greatest number of noble and happy human beings : that man is richest who, having perfected the functions of his own life to the utmost, has also the widest helpful influence, both personal and by means of his possessions, over the lives of others.

(*b*) Once when he had done thus, and gone from the feast to the stable where he had that night charge of the cattle, there appeared to him in his sleep One who said, greeting him by name, 'Sing, Cædmon, some song to me.' 'I cannot sing,' he answered ; 'for this cause left I the feast and came hither.' He who talked with him answered, 'However that be, you shall sing to me.' 'What shall I sing ?' rejoined Cædmon. 'The beginning of created things,' replied He.

(*c*) A poor widow once lived in a little cottage with a garden in front of it, in which grew two rose-trees, one bearing white roses and the other red. She had two daughters, who were just like the two rose-trees ; one was called Blanche and the other Rose, and they were the sweetest and best children in the world ; but Blanche was quieter and more gentle than her sister. Rose loved to run about the fields and to pick flowers and catch butterflies ; but Blanche remained at home with her mother and helped her in the household work.

(*d*) Fernand Cortez, the famous conqueror of Mexico, was born in the year fourteen hundred and eighty-five. He belonged to a noble but poor family. After many brilliant victories he returned to Spain, where he was coolly received by the King. One day he presented himself to the monarch, who said to him : 'Who are you ?' 'I am', replied Cortez proudly , 'the man who has given you more provinces than your ancestors left you cities.'

14

SYRIAC.

Paper-setter and Examiner—A. H. HARLEY, ESQ., M.A.

FIRST PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate :—

[Syriac passage]

2. (*a*) Explain carefully the syntax of the following **2** clause :—

[Syriac clause]

(*b*) What is the difference between [Syriac] ﻟ and [Syriac] ? **3**

(c) Parse ܐܠ and mention some of the peculiarities in **9**
the Pe'al and Aph'el forms of ܐ̈ܦ verbs.

(d) Remark on the form ܢܬܩܛܠ. **1**

(e) What is the force of ܡܢ in the clause ܐܚܕ ܐܘ ܡܢ? **1**

3. Translate:— **6**

ܡܛܠ ܗܝ ܐܢܩܐ ܐܠܚܡ ܘܠܘܡܒܢܕ ܗܘܘ ܗܡ ܣܘܟܠܗܐ ܘܦܬܡܐ
ܘܐܚܕܢܝ ܗܘܠܐ ܗܘܐ ܠܚܡܝ ܠܚܝܝܕܙ ܐܢܝ ܘܐܦܡܪܝ ܐܢܝ ܘܒܚܪܝ
ܘܡܕܘܡܗܐ ܘܡܕܘܡܐ. ܠܐܘܡܕܕ ܐܝ ܣܟܬܢܐ ܘܕܡܡܬܐ ܘܣܐܘܝ ܟܠܐ ܡܟܠܐܐ
ܗܘܝܐ. ܗܡ ܗܘܠܐ ܗܘܐ ܣܟܠܐ ܡܚ̈ܝܒܠܐܠܐ ܗܡ ܡܥܚܕܝ ܘܐܚܕ ܠܚܘܘܝ. ܚܬܘܠ
ܐܣܬܡ ܐܝܠܗܝ ܒܚܡ ܐܝܠܗܝ ܘܗܡ ܣܘܬܚܟܠܐ ܡܛ̇ܚܕܐ ܗܡ ܩܗܡܕ ܘܠܚܢ
ܚܕܐ ܐܚܘܐ ܘܠܡܥܚܕܝ ܠܚܘܡܚܐ ܡܚܟܠܐܠ ܘܡܚܙܐܠ ܘܒܘܣܡܒܢܕܝ. ܘܐܚܘܐ
ܘܡܒܝ ܘܚܠܕܚܕܐܠ ܐܨܘܘ ܠܚܠܚܘܘܝ ܘܡܚܘܕ ܠܚܘܘܝ ܗܘܣܐ ܘܗܣܐ ܘܡܗܘܒܡܐ ܐܗܪ
ܘܠܚܡ ܗܡܪܘܡ ܠܐ ܗܙܗܣ ܚܣܠܘܣ ܘܟܚܘܗܘܝ ܗܛܗܠܐ ܘܘܣܗ ܚܗܘܡܥܚܣܠܐܗܠܐ
ܠܚܕܗܐ ܚܘܗܝ. ܘܘ̈ܗܡܐ ܐܝܠܗܝ ܗܚܠܐ ܚܢܚܣܡܚ ܐܝܠܗܝ ܠܚܐܚܘܐ ܐܗܪ ܘܐܡܚܥܚܕܝ
ܣܢܠ ܟܠܐ ܙܘܐܬܘܗܘܝ ܘܠܚܚܚܬܒܘܠ ܐܝܣܠܐ ܘܐܦܠܐ ܐܚܘܡܠܝ ܐܦܠܐ ܣܠܡ ܐܗܚܣܡ
ܠܚܗܡܠܗܕܡ. ܐܠܐ ܚܠܡܚܚܕܐܠܚ ܘܗܚܝ ܣܥܘܗ ܗܚܡܣܐ ܗܕܘܣܥܚܣܠܚ ܘܐܣܐ
ܐܚܘܗܠܘܘܗܝ.

4. (a) Parse ܒܗܬܘܢ. **2**

(b) What is the meaning of the root of ܡܚܕܝܬܠ? **2**

(c) In what other ways can the expression 'between **4**
us and them' be rendered in Syriac?

5. Translate the following passages as *literally* as
possible:—

(a) ܐܘܢܚܟܡ ܕܡܩܥܐ ܗܚܢܠ ܗܚܟܠܐ ܣܝܘܕ ܡܟܗ ܚܘܐܙܠ ܡܚ̈ܗܡܟܘܐܠ **4**
ܘܠܘܗܐ. ܗܒܘ ܚܠܐܬܗܘܝܒ ܗܚܒܘ ܐܢܝ ܗܚܬܡܗܘܝܘܒ ܐܗܒܝ ܗܘܐܟܣ ܐܢܝ.
ܘܠܠܣܠܣܗ ܡܚܕܗܒܚܟܠܐ ܘܗܚܬܠ ܘܠܠܝܟܣ ܡܟܠܐܗܠܐ ܘܐܠܕܣܐ ܗܡ ܗܠܐܒܝ ܗܚܒܠ
ܘܗܡ ܒܘܡܚܟܠܐ ܘܗܘܐܣܐ ܘܘ̈ܗܟܠܐܪ. ܗܒܘ ܗܡ ܗܗܒܘܘܗܚܠ ܗܡܟܠܒ ܘܡܟܠܣ ܘܡܚܟܠܒ

ܗܡ ܗܬܐ ܗܝܬܐܠܠ. ܩܪܝܣ ܗܡ ܕܕܟܙܝܕܚܒ ܚܡܬܐ ܘܗܡ ܗܬܐܪܒ ܐܚܡܠܗ
ܗܕܣ. ܡܝܗܕܘܣ ܚܕܡܕܐ ܐܕܚܡܟܒ ܗܘܗܐ ܟܣ ܗܙܢܐ ܩܙܘܡܐ.

4   (b) ܐܩܪܝܣ ܗܡ ܐܒܕܘܝܣ ܐܕܚܡܐ ܘܐܚܕܡܪܣ ܐܣܐ ܟܙܝܚܡܐ.
ܚܡܗܐ ܘܠܠ ܡܝܚܝ ܢܚܟܣܘܣܣ. ܘܗܡܗܡܝܕ ܐܪܠ.ܢܡܚܕܘܣܣ. ܕܢܬܐ
ܢܘܡܙܢܐ ܢܡܟܚܕܡܪܣ, ܟܣ. ܚܢܬܐ ܢܘܗܙܢܐ ܢܟܐܚܟܡ, ܘܢܟܐܣܝܚܙܗ, ܗܡ
ܗܕܡܟܚܣܘܘܗ,. ܣܣ ܗܘܗ ܗܙܢܐ ܘܚܙܢܣܝ ܘܗ ܗܣܣܟܚܣܟܗ. ܐܪܠܠܝܡ
ܐܟܪܗܐ ܩܙܘܡܣ..

(c) Remark on the expression:—ܗܡܚܡܕܗ ܐܕܪܠ.   3

6. *Either*, Point passage (b) in Question 5.   13

Or, Attach pronominal suffixes to 3rd singular mas-
culine and 3rd plural masculine perfect Pe'al of ܚܙܐ (to see),
and write out the imperfect Ethpe'el of this verb.

7. (a) Give in Syriac a short account of the Pharisees or 40
of the Chaldaeans.

(b) Translate into Syriac :—

And the Franks (ܩܝܙܟܝ) said : ' We will only do so after
Salāh-ud-dīn (ܐܪܠܠ ܝܢ ܐܕܙܡ) gives us all the Frankish prisoners
he has, and restores to us all the cities he has taken from us.'
And when they sent to him he replied: 'Three thousand
prisoners only will I give in exchange for the Arabs (ܐܝܢܬܟܠ)
who are in Acre (ܐܟܚܟ). And if they leave me the city of
Acre I will give them city in exchange for city. And if not,
let them take them by the sword if they can as I took the
rest of the cities.'

SYRIAC.

Second Paper.

Note the alternative in Question 2.

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as possible.

The pointing should be done on the spare question-paper provided for this purpose.

1. Translate into English:—   8

ܐܡܠܒ ܘܡܒܡܐ ܘܪܘܡܒܚܕܡܐ ܒܒ ܠܐ ܐܡܠ ܗܝܒܝܕ ܡܕܘܝܠܐ

ܘܐܡܪ ܗܘܐ ܡܢ ܡܚܣܚܕܐ ܘܚܣܠܐ ܡܩܡܡܐ ܘܐܚܠܕ ܒܒ

ܘܬܘܦܝ ܩܘܦܙܢܕܘ ܐܘ ܡܗܦܙܐܕܚܠܗ ܠܒܡ ܬܘܦܡܠܐ

ܒܐܠܗܙܢܡܝ ܗܘ ܩܝܡܚܐ ܠܡܡܚ ܐܡܕܢܐ ܠܒܘܡܠܐܡܘܠ

ܐܘܬܡܠܡܢܣ ܗܘ ܘܐܒܒ ܬܚܡ ܠܠܐ ܬܘܦܡܚܐ ܘܘܪܘܡܚܒ

ܕܒܠܐ. ܕܘܘܡܚܡܚܡܣ ܘܩܝܡܚܡܡܣ ܐܒܒ ܐܗܙܢܡܒ ܗܘܪ

ܠܡܚܕ ܐܡܪ ܘܡܠܠܒܐ ܗܡܡܙܢܠܗܡܣ ܕܐܒܕܠܚܡܚܡܩܗܡܣ

ܘܡܠܕܗ ܘܐܦ ܡܚܚܣܚܡܕܐ ܗܡܠܒܓܡܐ ܘܐܒܒ ܐܗܙܢܚܒ ܠܠܐ

ܗܡܣܡܒܠܒܓܣܚܠܕܗܡܚܡܣܗܡܚܠܗܘܣܗܡ ܕܚܘ ܣܣܗܡ ܠܐܡܠܟܘܘܗ

ܐܒܘܒܠܐ ܐܡܪ ܘܡܚܢܘ ܗܕܗܒܐ ܘܠܒܠܐܐ ܘܗܡܕܘܗܘܡܡܣ

ܘܗܕܐܐ ܗܣܡܚܡܝ ܡܚܠܡܒܐ ܐܘܒܗܡܚܡܝ ܘܐܒܒ ܐܗܙܢܚܡܒ

ܠܠܐ ܐܚܣܡܢܙܢܠܐ ܚܒܘ ܐܠܗܘܘܗܡܡܣ ܗܚܕܐ ܠܠܕܗܡܘܙ ܡܠܐ

ܠܗܚܐܘܒ ܡܢ ܡܗܡܗܓܚܣܠܐ ܡܠܟܐ ܘܐܠܗܘܘܗܡܡܣܗܣ ܒܕܚܒ

ܠܠܐ ܬܘܦܡܚܐ ܐܡܪ ܘܡܚܗܘܒܒ ܡܢܡܚܠܒ ܘܐܡܚܐܠܐ ..

2. (*a*) Point the above passage.　　　　　　　　　　15

　(*b*) Parse the words underlined in question 1.

<div align="center">Or,</div>

(*a*) Make short sentences using the following words :—

ܟܘܣܟܘ ؛ ܢܩܩܚܕܐܩܐ ؛ ܠܐ ܡܨܚ ؛ ܚܢܡ ؛ ܢܠܟܡܐܨܢܐ ؛ ܝܚܟܐ ؛ ܐܩܬܙܘܟܐ ؛ ܦܝܚܡܐ ܡܡܨܚܐ ؛

(*b*) Give the exact meaning of the above forms.

3. (*a*) Point and translate :—　　　　　　　　　　'20

ܘܐܝܗܘܚܡܐ ܡܙ ܠ ܘܝ ܠ ܐܝܘܢܠ ܠܐ ܡܚܠܩܚܝ ܠܐ ܠܐ ܘܐܘܡܡܘܘ ܐ
ܘܗܘܘܩܝܣܐ ܡܠܐ ܐܡܡܩܡܘܐ ܘܡܠܐܘܘܝ ܝܚ ܚܕܝܡܝ ܡܚ
ܡܡܣܚܐ ܚܕܝܣܝ ܐܢܐ ܘܡܠܝ ܠܚ ܠܐܡܡܚܡܘܐ.ܘܡܝܡܚܐ
ܡܚ ܗܘܘܩܝܣܐ ܐܡܚܠ ܠ܂ܐܚܐ ܢܩܚܝ ܘܡܚܙܘܝ ܠܚܕܝܡܝ. ܢܚܠ.
ܘܝ ܚܠܚܝ ܗܘܝ ܘܚܐܘܩܝܣܐ ܚܡܒܐ ܠܠܟܚܚ ܠ܂ܐܚܠ ܡܚܒ
ܩܡܡܠ ܠܚܒܘܝ ܚܠ ܗܘ ܘܡܠܐܘܘܝ ܠܐ ܡܣܝ ܠܚܝ ـ ـ ـ ـ ـ ـ
ܘܢܡܝܝ ܠܠܡܚܢܐ ܘܚܐܘܘܚܡܐ ܐܡܚܐ܂ ܐܗܠܐ ܡܠܠܘܡܝܣܐ
ܘܝܡܠܐ ܘܐܡܚܢܐ ܢܚܠ ܀܀

(*b*) What are the rights and duties of a Bishop or a Presbyter according to Barhebraeus ?

4. Give in Syriac the substance of the Epistle of St. Ignatius　15 to Polycarp or to the Romans.

5. Translate, adding where necessary, notes on the grammar.　　12

ܠܳ ܐܳܚܣܡܘܿܟܐ ܟܐܚܐܚܓܟܗܠܐ ܐܳܘ ܟܘܗܙܝܟܿܕܢܫܐܐ ܡܝܐܟܝܼܕ

ܐܳܘ ܟܐܚܐܚܓܟܐ ܟܘܗܙܝܟܿܕܢܫܐܐ ܠܐ ܝܡܓ ܐܠܐ ܢܬܡܝ ܡܝܳܡ ܟܒܝܚܟܐ

ܟܝ ܟܓܝܼܡ ܠܚܢܗܝܘ ܬܝ ܟܚܿܘ ܟܗܟܡ ܟܚܘܙܢܐ ܒܡ ܗܩܕܝܣܘܿܗܣ

ܠܠܐܡܝܒ ܐܳܡܿܟܢܐ ܩܿܡܐ ܗܩܕܝܣܘܿܗܣ ܚܡܘܢܟܐ ܘܘܳܩܟܐ ܘܩܚܝ

ܝܦܿܓܐ ܡܠܐ ܟܚܟܐ ܘܡܚܟ ܟܓܗܳܚܓܟܐ ܐܳܘ ܟܘܙܝܟܿܕܢܟܐ ܬܝ ܢܗܙܘ

ܟܒ ܓܝ ܐܳܚܣܡܘܿܟܐ ܠܚܚܿܟܐܐ ܠܠܐܗܳܡܟܐ ܬܝ ܠܠܐܡܣܡܘܣ ܟܠܠܐ

ܚܿܘܡܡܟܐ ܠܟܠܐ ܐܿܕܝܼܝ ܚܠܐܡܡܗܣ ܬܝ ܟܢܙܐ ܐܳܝܝܓܝܠܝܼܡ

ܘܘܿܚܚܐ ܠܝܟܐ ܬܝ ܢܙܢܠܐ ܬܝ ܢܿܪܠܐܙ܀ܩܿܡܿ ܗܩܕܝܣܘܿܗܣ ܚܡܘܢܟܐ ܘܗܟܕܘܚܡܩܢܐܐ

ܘܐܳܟܩܢܐ ܟܘܝܼܕܟܐ ܘܟܠܚܿܡܝܼܪ ܐܳܗ ܟܐܚܡܡܩܡܘܐ ܟܚܡ ܡܢ ܠܝܼ

ܚܥܩܿܘܿܒܝܼܟܐ ܢܟܿܒ ܚܩܠܚܡܝܼܗ ܘܬܝ ܟܚܠܟ ܐܒܝܗ ܟܠܠܐ ܡܚܝ

ܢܟܿܚܗܝ ܠܠܐܓܝܼܡ ܐܳܩܚ ܗܩܕܝܣܘܿܗܣ ܘܡܫܿܩܠܢܐܐ ܘܓܝܼܡܠܚ܀܀

---

6. (*a*) Translate into pointed Syriac :— 30

Ah, Spirit of the God! Wake me out of my sleep in the morning. I shall rise-up from my bed to glorify Thee. Grant that I may by Thy power know Thee, love Thee, and serve Thee all the days of my life and for ever and ever. I know that it is but right and proper

that I should confess (ܡܫܰܘܕܶܐ) my Lord and my God before

the world in fear and in awe.

(*b*) Translate into Colloquial Syriac :—

Look at me. Please, come here. Do it yourself. Would you kindly go there, Yes, Lord! I am a sinner.

HEBREW.

Paper-setter—A. H. HARLEY, ESQ., M A.

FIRST PAPER.

Observe the alternatives in Questions 3 and 5.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate:—

(a) וְהוֹכִחַ אברהם את־אבימלך על־אדות בְּאֵר הַמַּיִם אֲשֶׁר גָּזְלוּ עבדי אבימלך : ויאמר אבימלך לא יָדַעְתִּי מי עשׂה את־הדבר הזה וגם־אתה לא־הגדת לי וגם אנכי לא שמעתי בלתי היום : ויקח אברהם צאן ובקר ויתן לאבימלך ויכרתו שניהם ברית : ויצב אברהם את־שבע כבשׂת הצאן לבדהן : ויאמר אבימלך אל־אברהם מה הנה שבע כבשׂת האלה אשר הצבת לבדנה : ויאמר כי את־שׁבע כבשׂת תקח מידו בעבור תהיה־לי לעדה כי חפרתי את־הבאר הזאת : על־כן קרא למקום ההוא באר שבע כי שם נשבעו שניהם :

(b) ויחר ליעקב וירב בלבן ויען יעקב ויאמר ללבן מה־פשעי מה חטאתי כי דלקת אחרי : כי מששת את־כל־כלי מה־מצאת מכל כלי־ביתך שים כה נגד אחי ואחיך ויוכיחו בין שנינו : זה עשׂרים שׁנה אנכי עמך רחליך ועזיך לא שכלו ואילי צאנך לא אכלתי : טרפה לא הבאתי אליך אנכי אחטנה מידי תבקשׁנה גנבתי יום וגנבתי לילה : הייתי ביום אֲכָלַנִי חרב וקרח בלילה ותדר שנתי מעיני : זה־לי עשׂרים שנה בביתך עבדתיך ארבע־עשׂרה שׁנה בשׁתי בנתיך ושׁש שׁנים בצאנך ותחלף את־משׂכרתי עשׂרת מנים : לולי אלהי אבי אלהי אברהם ופחד יצחק היה לי כי עתה ריקם שׁלחתני את־עניי ואת־יגיע כפי ראה אלהים ויוכח אמשׁ :

2. (a) Remark on the following:— בִּלְתִּי, בַּעֲבוּר, לְבַדְנָה, and   5
attach pronominal suffixes to לֵבָב.

    (b) Parse all the verbs in passage (a), Question 1.   7

    (c) What is the pointing of the interrogative מָה ?   3

    (d) Attach pronominal suffixes to the singular and plural of אָח   1
(brother).

    (e) Remark on the forms לוּלֵי and בְּיִשָׁתֵי.   3

    (f) What is meant by Daghesh Forte Conjunctivum ? Illustrate   3
its use.

3. Translate:—

Either,   6

ותאמר נעמי שבנה בנתי למה תלכנה עמי העוד־לי בנים

במעי והיו לכם לאנשים : שבנה בנתי לכן כי זקנתי מהיות

לאיש כי אמרתי יש־לי תקוה גם הייתי הלילה לאיש וגם

ילדתי בנים : הלהן תשברנה עד אשר יגדלו הלהן תעגנה

לבלתי היות לאיש אל בנתי כי־מר־לי מאד מכם כי יצאה

בי יד־יהוה :

Or,

ויאמר דבי המטפחת אשר עליך וְאֶחֱזִי־בָה ותאחז בה

וימד שש שערים וישת עליה ויבא העיר : ותבוא אל־חמותה

ותאמר מי־את בתי ותגד־לה את כל־אשר עשה לה האיש :

ותאמר שש־השׂערים האלה נתן לי כי אמר אלי אל־תבאי

ריקם אל־חמותך : ותאמר שבי בתי עד אשר תדעין איך

יפל־ דבר :

4. (a) Parse שַׁבְנָה, שְׁבִי, הָבִי, תֵּדְעִין.   4

    (b) How are conditional clauses expressed in Hebrew ?   3

5. Point *one* of the passages in Question 3.   8

6. Translate into Hebrew :—   10

    (a) And the Lord appeared to him a second time.

    (b) When the Lord thy God shall deliver them before thee thou
shall smite them and utterly destroy them; thou shalt make no
covenant with them nor show mercy unto them.

    (c) In that day shall there be an altar to the Lord in the midst
of the land of Egypt, and a pillar at the border thereof to the Lord.
And it shall be for a sign and a witness unto the Lord of hosts in the
land of Egypt; for they shall cry unto the Lord because of the op-
pressors, and he shall send them a saviour, and he shall deliver them.

HEBREW.

Second Paper.

Observe the alternative in Question 3.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. (a) Translate :—   10

זִכְרוּ רִאשֹׁנוֹת מֵעוֹלָם כִּי אָנֹכִי אֵל

וְאֵין עוֹד אֱלֹהִים וְאֶפֶס כָּמוֹנִי :

מַגִּיד מֵרֵאשִׁית אַחֲרִית וּמִקֶּדֶם אֲשֶׁר לֹא־נַעֲשׂוּ .

אֹמֵר עֲצָתִי תָקוּם וְכָל־חֶפְצִי..אֶעֱשֶׂה :

קֹרֵא מִמִּזְרָח עַיִט מֵאֶרֶץ מֶרְחָק אִישׁ עֲצָתוֹ

אַף־דִּבַּרְתִּי אַף־אֲבִיאֶנָּה יָצַרְתִּי אַף־אֶעֱשֶׂנָּה :

(b) What is the construction of the substantive verb אֵין ?

(c) Parse fully עֲצָתוֹ

2. (a) Translate :—   10

רָנּוּ שָׁמַיִם וְגִילִי אָרֶץ יִפְצְחוּ הָרִים רִנָּה

כִּי־נִחַם יְהוָֹה עַמּוֹ וַעֲנִיָּו יְרַחֵם :

וַתֹּאמֶר צִיּוֹן עֲזָבַנִי יְהוָֹה וַאדֹנָי שְׁכֵחָנִי :

הֲתִשְׁכַּח אִשָּׁה עוּלָהּ מֵרַחֵם בֶּן־בִּטְנָהּ

גַּם־אֵלֶּה תִשְׁכַּחְנָה וְאָנֹכִי לֹא אֶשְׁכָּחֵךְ :

הֵן עַל־כַּפַּיִם חַקֹּתִיךְ חוֹמֹתַיִךְ נֶגְדִּי תָּמִיד :

מִהֲרוּ בָּנָיִךְ מְהָרְסַיִךְ וּמַחֲרִיבַיִךְ מִמֵּךְ יֵצֵאוּ :

(b) In the first line for יפצחו read וּפְצְחוּ and translate.

3. Translate *any three* of the following :—   8

(a) כִּי שִׂמַּחְתַּנִי יהוה בְּפָעֳלֶךְ בְּמַעֲשֵׂי יָדֶיךָ אֲרַנֵּן :

מַה־גָּדְלוּ מַעֲשֶׂיךָ יהוה מְאֹד עָמְקוּ מַחְשְׁבֹתֶיךָ :

אִישׁ־בַּעַר לֹא יֵדָע וּכְסִיל לֹא יָבִין אֶת־זֹאת :

(b) הַנֹשֵׂא שֹׁפֵט הָאָרֶץ הָשֵׁב גְּמוּל עַל־גֵּאִים :

עַד־מָתַי רְשָׁעִים יהוה עַד־מָתַי רְשָׁעִים יַעֲלֹזוּ :

יַבִּיעוּ יְדַבְּרוּ עָתָק יִתְאַמְּרוּ כָּל־פֹּעֲלֵי אָוֶן :

(c) כָּל־הַיּוֹם חֵרְפוּנִי אוֹיְבָי מְהוֹלָלַי בִּי נִשְׁבָּעוּ :

כִּי־אֵפֶר כַּלֶּחֶם אָכָלְתִּי וְשִׁקֻּוַי בִּבְכִי מָסָכְתִּי :

מִפְּנֵי־זַעַמְךָ וְקִצְפֶּךָ כִּי נְשָׂאתַנִי וַתַּשְׁלִיכֵנִי :

(d) גְּבוּל־שַׂמְתָּ בַּל־יַעֲבֹרוּן בַּל־יְשֻׁבוּן לְכַסּוֹת הָאָרֶץ :

הַמְשַׁלֵּחַ מַעְיָנִים בַּנְּחָלִים בֵּין הָרִים יְהַלֵּכוּן :

יַשְׁקוּ כָּל־חַיְתוֹ שָׂדָי יִשְׁבְּרוּ פְרָאִים צְמָאָם :

(a) Attach the pronominal suffixes to the singular and plural of 12
פֹּעַל (work). To which class of nouns does this belong ?   Explain
the use of the Composite Shěva in its declension.

(b) What is the significance of הַנֹּשֵׂא and יִתְאַמְּרוּ ?

(c) Where is the sign 'Athnāḥ used, and how does it influence
vowels in its neighbourhood ?

(d) Remark on the expression : כָּל־חַיְתוֹ שָׂדָי

5.   Translate :—   30

וַיָּבֹא הַמֶּלֶךְ דָּוִד וַיֵּשֶׁב לִפְנֵי יהוה וַיֹּאמֶר מִי אָנֹכִי אֲדֹנָי

יהוה וּמִי בֵיתִי • כִּי הֲבִיאֹתַנִי עַד־הֲלֹם : וַתִּקְטַן עוֹד זֹאת

בְּעֵינֶיךָ אֲדֹנָי יהוה : וּמַה־יּוֹסִיף דָּוִד עוֹד לְדַבֵּר אֵלֶיךָ וְאַתָּה

יָדַעְתָּ אֶת־עַבְדְּךָ אֲדֹנָי יהוה : בַּעֲבוּר דְּבָרְךָ וּכְלִבְּךָ עָשִׂיתָ

אֵת כָּל־הַגְּדוּלָה הַזֹּאת לְהוֹדִיעַ אֶת־עַבְדֶּךָ : עַל־כֵּן גָּדַלְתָּ יהוה

אֱלֹהִים כִּי־אֵין כָּמוֹךָ וְאֵין אֱלֹהִים זוּלָתֶךָ בְּכֹל אֲשֶׁר־שָׁמַעְנוּ

בְּאָזְנֵינוּ : וּמִי כְעַמְּךָ כְּיִשְׂרָאֵל גּוֹי אֶחָד בָּאָרֶץ אֲשֶׁר הָלְכוּ־

אֱלֹהִים לִפְדּוֹת־לוֹ לְעָם וְלָשׂוּם לוֹ שֵׁם וְלַעֲשׂוֹת לָכֶם הַגְּדוּלָה

וְנֹרָאוֹת לְאַרְצֶךָ מִפְּנֵי עַמְּךָ אֲשֶׁר פָּדִיתָ לְּךָ מִמִּצְרַיִם גּוֹיִם

וֵאלֹהָיו : וַתְּכוֹנֵן לְךָ אֶת־עַמְּךָ יִשְׂרָאֵל לְךָ לְעָם עַד־עוֹלָם

וְאַתָּה יהוה הָיִיתָ לָהֶם לֵאלֹהִים :

6. Render into Hebrew :   30
    (a) And it came to pass when he saw her that he rent his clothes
and said, Alas, my daughter! thou hast brought me very low and
thou art one of them that trouble me, for I have opened my mouth
unto the Lord and I cannot go back.

    (b) Surely none of the men that came up out of Egypt, from
twenty years old and upwards, shall see the land which I sware unto
Abraham, because they have not wholly followed me.

    (c) When Moses heard it he fell upon his face.

KHASI.

(*For Female Candidates*).

First Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate the following into English : —   25

        Ia ki ktien khlemrain kham burieh pynngen,
        La ki long kiba dei ruh wat kham kren ;
        Wat juh leh ia ki kam kiba khlemrain,
        La ha ka ba dum ne ha ka ba phngain ;
        Wat juh mlien ban kren ne ban leh mynthi,
        Ba ioh mangkariang noh ka jingtipsngi ;
        Wat juh mlien ban nang, ban shait ka lorni,
        Ba ioh ka shongseng ka long allukhi;
        Wat juh mlien ban krensa ne ban lehsa,
        Ba ka duhbor noh ka akor bat ha ;
        Wat juh piaw, wat juh at khu, wat juh khong,
        B'ki jingbha baroh ki kylla khongpong.

2. To what different things does the author of *Ka Jingsneng*   15
Tymmen compare a woman ?

3. Explain the following in Khasi with reference to the context :—   10
    (a) Nangta sa ban iapoi h'u shnong h'u thaw,
        Ban hap ia Siew katba thoro ka kau.
    (b) Ka kam bad ka ktien to da khan adkar,
        Ba iu tharia bakhur ka kem ka lar.

4. Correct the following, and name the grammatical mistakes con-   25
tained therein :—
    (a) Ka la bha than eh ba phi la wan namar nga khmieh lynti ho
ia phi.
    (b) U la lah iap noh ba u da pang khieshoh.
    (c) U John u kham bl a tam eh ia u James.
    (d) Ki jngemsnam ynda u la Sait u Spain pat ia kito.
    (e) Uba bha u briew te uba shu kuah eh ban iarap ia ki nong-
kyrduh.

5. Translate the following into English :—   25

Kynmaw ba ym don ka lynti kaba suk sha ka shnong ka jingtip.
Hynrei ka kham myntoi pynban ba kan long kumta. Ym dei ka
jingsuk, hynrei ka jingpyrshang; ym dei ka bajom, hynrei kaba
eh kaba pynlong rangbah ia u briew. Phim lah ban kot sha kano
kano ka jinglong kaba don burom khlem da iashem bad ki jingeh, bad
khlem da jop ia ki. Kita ki jingeh pynban ki long ki nongialam jong
ngi, kumjuh kumba ki jingbakla ki long ki nonghikai ia ngi. Haba u
briew u la bakla shisien, u la ioh hikai kein na kata : kumta ki jingeh
ki iarap ia ngi ba ngin jop.

KHASI.

(For Female Candidates).

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate the following into English :—   15

Ka don ka jingpynshitom kaba U Siem u juh pyndait nar, pyndait
dieng, u saikhum u saiteh, ka slung ka phatok, kino ki juh don
ryngkat ha kaba un pyniaid ia la ka jingbishar bap rai ha kitei
ki ain ki hukum; ka jingbishar ki Siem ka long kaba ityunad
shibun mynhyndai, ki bishar ha ka dorbar bad ki rangbah kiba khraw
batri ; kim juh kyrkieh, ki wad ia ka jingshisha haduh ba ki kur u
nongshah mudui ki aiti da kaba sugowbha ba un rem hapoh kano
kano ka ain na kitei ba la ong hanong, lada ka long haduh u tangon u
lymban ruh.

2. What, according to the author of *Ka Kitab Niamkhein Ki*   15
Khasi, is the custom prevailing among the Khasis relating to succes-
sion ?

3. Explain the following in Khasi :—   30

(a) Kane ka rukom kaba sniew, kaba don ha pdeng ki khynnah
ba ki ialeit khreh kot ha iing ki lok, ka mih na kaba ki iawad ban
nang khlem da shitom.

(b) U briew um long kum ka sla kaba per ha um, kaba leit katba
lam ka um ia ka, hynrei u long kum u dohkha uba jugi katba u
mon hi.

(c) Ki briew ki juh ong ' To katta-katta eh iarad khyndiat khyn-
soit.' Hynrei kynmaw ia ka jingong ba lada ngi sumar ia ka peisa,
ka tyngka kan sumar hi ia lade.

4. Translate the following into English :—   25

Khnang ba phin long uba neh jingmut ha la ka kam, phi dei ban
pyrkhat bha lypa. Phi dei ban thew ia ki nia'kum ha ka tarajur, ba
phin khmieh la ka bit ne em ban loh ia ka. Te ynda phi kut la ka
jingmut, la kumno kumno ruh, wat kylla shuh sha kamon lane sha
kadiang. Bunsien ngi iohi ia ki briew kiba nap jingmut ba kim roi
naba kim long kiba neh jingmut. Bad bunsien ngi shem ba kiba
luin jingmut ki roi namar ba ki long kiba neh jingmut. Uwei u briew
uba bha u la ong kumne, ' Phi hynrei phi long ia kaba phi mon ban

long : naba ka bor jong ka mon ka long kumta, lem bad ka jingkyrkhu U Blei, ba ia kano kano ba phi mon shisha ban long, ia kata hi phin long kein.'

5. *Shisha* me la kren kaba dei ; hynrei katno kaba khraw ka jing- 9
isnei ba lymne ma-me, *hynrei tam eh* ma nga, ngim shym la kylla long kata ka dak maham. Kane ka long ka daw ba ngin ainguh ia U Blei, *ba ngin sheptieng ha khmat jong u,* bad ban kynmaw brabor ia ka tnga U Lot.

Parse the italicized words in this passage.

6. Mention three pairs of correlatives in Khasi, and compose 6
simple sentences illustrating their use.

HISTORY.

Paper-setters— { M. N. BASU, ESQ., M.A., *Bar.-at-Law.*
BABU ADHARCHANDRA MUKHERJEE, M.A.,
B.L.
BABU RAMESCHANDRA MAJUMDAR, M.A.

Head Examiner—M. N. BASU, ESQ., M.A., *Bar.-at-Law.*

FIRST PAPER.

Examiners— { BABU AKSHAYKUMAR SARKAR, M.A.
  „ GAURANGANATH BANERJEE, M.A.
  „ BHUBANMOHAN SEN, M.A.
  „ BIJOYCHANDRA SENGUPTA, M.A.
S. M. BOSE, ESQ., M.A.
BABU KIRANSANKAR RAY, M.A.
  „ KISORIMOHAN GUPTA, M.A.
  „ ATINDRANATH MUKERJEE, M.A.

Candidates are required to give their answers in their own words as far as practicable.

Only EIGHT *questions to be answered, not more than* TWO *being taken from* EACH *of the groups.*

The questions are of equal numerical value.

GROUP A

1. Give a short account of the struggle between the English and the Britons. Briefly describe the political conditions of Great Britain at the beginning of the seventh century A.D.

2. Sketch the career of Dunstan and give an estimate of his work. Write what you know of Bede.

8 3. State the measures adopted by William I to establish a strong monarchy in England. To what extent was he successful in his endeavour ?

GROUP B.

4. Describe John's quarrel with the Barons. Mention the main provisions of the Magna Charta.

5. Trace the causes, progress, and effect of the Peasants' Revolt of 1381.

6 Review the home and foreign policy of Henry VII. Why was such policy successful at the time ?

GROUP C.

7. · Write a short history of the reign of Charles I during the period between 1629 and 1640.

8. Write critical notes on (a) the Treaty of Dover, (b) the Exclusion Bill, and (c) the Declaration of Indulgence.

9. Briefly sketch the history of the elder Pitt's ministry.

GROUP D.

10. What were the main grievances of the Irish after the Act of Union ? To what extent and by whom have they been removed ?

11. Enumerate the measures adopted in the nineteenth century for parliamentary reform.

12. Say what you know of *any four* of the following :—
   (a) The Middlesex Election of 1768-9.
   (b) The Armed Neutrality.
   (c) The Gordon Riots.
   (d) Napoleon's Continental system.
   (e) The Poor Law of 1834.
   (f) The Anti-Corn-Law League.

HISTORY.

SECOND PAPER.

Examiners—
{ BABU DHARMADAS BANERJEE. M.A.
  BABU PRAMATHANATH BANERJEE, M.A.
  BABU DEBENDRANATH SEN, M.A.
  BABU SUBIMALCHANDRA SARKAR, M.A.
  BABU HEMCHANDRA RAY CHAUDHURI, M.A.
  BABU PRASANNAKUMAR BASU, M.A.
  ARUN SEN, ESQ., B.A. (*Cantab*).
  BABU RAKHALDAS BANERJEE, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only EIGHT *questions to be answered, not more than* TWO *being taken
from* EACH *of the groups.*

The questions are of equal numerical value.

GROUP A.

1. Indicate the several causes that bound the Greeks together as one people. Why did these causes never produce any political union ?

2. 'By the Solonian constitution the whole political power was vested in the hands of the nobles. Cleisthenes resolved to make the Athenian constitution a democracy.' Elucidate this statement.

3. Review the character and career of Themistocles.

Group B.

4. Give an account of Socrates: his teachings, condemnation, and death.

5. Write a short sketch of the Peloponnesian War from its twelfth year (420 B.C.) to the dismissal of Alcibiades (407 B.C.).

6. Trace the relation between Greece and Macedon up to the assassination of Philip.

Group C.

7. Briefly sketch the original constitution of Rome. How was the power of the senate changed (a) after the Punic Wars, (b) at the end of the Roman Republic?

8. What circumstances led to the quarrel between Pompey and Caesar? Write a history of this quarrel up to the death of Pompey.

9. Summarize the course of events in the history of Rome from the assassination of Julius Caesar to the dissolution of the second Triumvirate.

Group D.

10. Give, in brief outline, the history of the Flavian Emperors, with a special account of the first of this line.

11. How did Constantine become the sole emperor? What led to the change of capital from Rome?

12. Write short notes on *any six* of the following:—(a) Tyrants of Greece; (b) Plataea; (c) Cimon; (d) Cnidus; (e) Censor; (f) Cannae: (g) Timoleon: (h) Comitia Tributa, and (i) law of majesty.

LOGIC.

Paper-setters—
{ BABU ADHARCHANDRA MUKHERJEE, M.A
B.L.
J. R. BANERJEA, ESQ., M.A., B.L.
BABU AMBICA CHARAN MITRA, M.A.

Head Examiner—BABU AMBICACHARAN MITRA, M.A.

FIRST PAPER

Examiners—
{ BABU SYAMLAL LAHA.
BABU SURESCHANDRA DATTA.
BABU UPENDRANATH GUPTA.
BABU SURENDRALAL KUNDU.
BABU KUMUDBANDHU CHAKRABARTI.
BABU JITENDRANATH DASGUPTA.
BABU HARIDAS BHATTACHARYYA.
MR. ROY ROLAND THOMAS.
BABU BIRENDRACHANDRA MUKHERJEE.
BABU NALINIKUMAR DATTA.
BABU DHIRENDRANATH GHOSHAL.
BABU INDUBHUSAN SENGUPTA.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Either,

1. Define Logic, and point out its relation to Psychology.   15

Or,

Determine the scope of Logic, and indicate the uses of its study.

Either,

2. Distinguish between Formal and Material Truth. Which of   15
them constitutes the proper subject-matter of Logic ?

Or,

Distinguish between Realism, Nominalism, and Conceptualism,
and point out their bearing on the nature of the logical processes.

Either,

3. What do you understand by the Opposition of Propositions ?   15
Explain its different forms, indicating their practical applications.

Or,

(a) Classify Propositions, with examples.
(b) Reduce the following propositions to their logical form,
indicating their quality and quantity :—   .   8
(i) The honest alone win the confidence of others.

15

(ii) The critical spirit is not infrequently the fault-finding spirit.

(iii) People seldom fully realize the difficulties of others.

(iv) Not all are friends who profess to be so.

Either,

4. Distinguish between Deductive and Inductive Inference; and   15
discuss the question of their relative priority as modes of proof.

Or,

Indicate the different modes of testing the validity of the syllogistic
argument, illustrating your answer with examples.

Either,

5. Distinguish between Inversion and Contraposition. How are   10
they related to Obversion ?

Or,

Draw the inferences which follow from the proposition ' None but
the industrious deserve success.'

6. (*a*) Prove that in every figure, if the minor premiss is negative,   14
the major must be universal.

(*b*) Prove that an O proposition can be the major premiss only
in the third figure, and the minor premiss only in the second.

7. Test *any four* of the following arguments :—   16

(*a*) If questions do not leak out, the University is not to blame ;
but questions have leaked out : the University, therefore, is res-
ponsible for it.

(*b*) How can you say that he is not a careful examiner, when he
is severe in examining his papers, as careful examiners are known to
be ?

(*c*) The Vice-Chancellor of this University must be an ease-loving
person, since in no day of the year does he grant an interview, even
for five minutes, to all the graduates of the University.

(*d*) John evidently is not honest, for only the honest are straight-
forward in their conduct, while John is not so.

(*e*) Candour as a virtue ought to be cultivated therefore
secrecy in war should be strongly condemned.

LOGIC.

SECOND PAPER.

Examiners—
{
BABU JOGINDRANATH MITRA.
BABU SITARAM BANERJEE.
BABU PHANINDRABHUSHAN CHATTERJEE.
BABU SATISCHANDRA SEN.
BABU KALIDHAN CHATTERJEE.
BABU PURNACHANDRA SEN.
BABU KSHIRODCHANDRA GUPTA
BABU BIBHUTIBHUSHAN MITRA.
BABU SASIBHUSHAN BASU.
BABU KALIDAS SEN.
BABU RAJANIKANTA DATTA.
BABU KANAILAL BANERJEE.
}

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. What are the characteristics of a valid Induction ? Explain d illustrate them fully. 15

Either,

2. (a) Is Elimination the essence of Induction ? Fully discuss this question. What exactly has Elimination to do with the proof of an hypothesis ? 14

Or,

(b) Distinguish clearly between (i) Perfect and Imperfect Induction, (ii) Complete and Incomplete Induction. 14

3. Can Induction be reduced to syllogistic reasoning ? Fully discuss this question, examining the different attempts that have been made to resolve the former into the latter. Briefly state and explain the Deductive Method. 16

Either,

4. (a) Explain how Plurality of Causes and Intermixture of Effects affect the application of the Method of Agreement. What advantage has the Method of Difference over the Method of Agreement, and what advantage has the latter over the former ? 14

Or.

(b) State and explain the grounds of Inductive Inference. 14

Either,

5. (a) What is a cause ? What is a condition ? what is the relation of the latter to the former ? What are the different ways of viewing causation, and which of them is the most satisfactory ? 15

Or,

(b) What are the circumstances favourable to Discovery ? What are the different forms of hypotheses ? 15

Either,

6. (*a*) Explain the nature of inference from analogy, and estimate   14
its value. How does it differ from Induction ?

Or,

(*b*) What is Natural Classification ?   Is a Natural Group deter-   14
mined by a Type or by a Definition ?   Discuss this question.

7. Test *any three* of the following arguments :—   12

(*a*) Punishment must have some other and higher justification
than the prevention of crime, for if punishment were only for the
sake of example, it would be indifferent whether we punished the in-
nocent or the guilty, since the punishment, considered as an example,
is equally efficacious in either case.

(*b*) Women as a class have not been hitherto equal in intellect to
men, therefore they are necessarily inferior.

(*c*) Moisture bedews a cold metal or stone when we breathe on it.
The same appears on a glass of ice-water, and on the inside of
windows when sudden rain or hail chills the external air. Therefore
when an object contracts dew it is colder than the surrounding air.

(*d*) With various kinds of polished metals, no dew is deposited '
but with various kinds of highly polished glass dew is deposited.
Therefore the deposit of dew is affected by the kinds of substances '
exposed.

(*e*) We observe very frequently that very poor handwriting
characterises the manuscripts of able men, while the best hand-
writing is as frequent with those who do little mental work when
compared with those whose penmanship is poor. We may, therefore,
infer that poor penmanship is caused by the influence of severe
mental labour.

MATHEMATICS.

Paper-setters— $\begin{cases} \text{Hon. Justice Sir Asutosh Mukherjee,} \\ \quad \text{Kt., C.S.I., M.A., D.L.} \\ \text{Dr. D. N. Mallik, B.A., Sc.D.} \\ \text{Babu Narendrakumar Majumdar, M.A.} \end{cases}$

Head Examiner—Dr. D. N. Mallik, B.A., Sc.D.

First Paper.

Examiners— $\begin{cases} \text{Babu Chintaharan Ray.} \\ \text{Babu Surendranath Chatterjee.} \\ \text{Babu Narendrakumar Majumdar.} \\ \text{Babu Baikunthachandra Ray.} \\ \text{Babu Hemchandra Sengupta.} \\ \text{Babu Upendranath Ray.} \\ \text{Babu Satischandra Ghosh,} \\ \text{Babu Karunamay Khastgir.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Select FOUR *questions from Group* A *and* THREE *from Group* B.

Group A.

1. (1) Show that a quadratic equation cannot have more than two roots. 6

(2) If p and q are the roots of the equation 7

$$3x^2 + 6x + 2 = 0,$$

show that the equation whose roots are $-p^2/q$ and $-q^2/p$ will be

$$3x^2 - 18x + 2 = 0.$$

2. Solve:

(1) $\sqrt{\dfrac{x}{y}} + \sqrt{\dfrac{y}{x}} = \dfrac{10}{3}$, $x + y = 10$; 7

(2) $x^3 + y^3 = \frac{9}{2} xy$, $x + y = 3$. 6

Either,

3. If A varies as B when C is constant, and A varies as C when B is constant, then will A vary as BC when both B and C vary. 13

Or,

Find four proportionals such that the sum of the extremes is 21, the sum of the means 19, and the sum of the squares of all four numbers 442. 13

4. (1) Find the number of permutations of n different things   7
taken r at a time.

(2) Find the number of permutations of the letters of the word   6
NARES taken all together.

5. (1) Write down the expansion of $(1-x)^{-2}$.   6

(2) Show that the coefficient of the middle term in the expansion   7
of $(1+x)^{2n}$ is equal to the sum of the coefficients of the two middle
terms in the expansion of

$$(1+x)^{2n-1}.$$

6. Obtain the expansion of $\log_e (1+x)$.   13

7. (1) Prove geometrically that   7

$$\sin 2A = 2\sin A \cos A,$$

where A is a positive angle and $2A$ less than 90°.

(2) Prove that   6

$$\tan A + \cot A = 2\operatorname{cosec} 2A.$$

8. Draw the graph of $y = \operatorname{cosec} x$ from $x=0$ to $x=\pi$.   13

9. In a plane triangle $b=540$, $c=420$, and $A=52°6'$; find B and C,   13
given that

$$\log 2 = 0.30103, \ L\tan 26°3' = 9.6891430,$$

$$L\tan 14°20' = 9.4074189, \text{ and } L\tan 14°21' = 9.4079453.$$

10. In any plane triangle prove that

$$(1) \ \frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c};$$ 6

$$(2) \ a\sin(B-C) + b\sin(C-A) + c\sin(A-B) = 0.$$ 7

GROUP B.

11. (1) Prove that the square of the principal ordinate of any
point on a parabola is equal to the rectangle contained by the latus
rectum and the abscissa.

(2) If PL be drawn at right angles to $\acute{A}\dot{P}$, meeting the axis in
L, NL is always equal to the latus rectum.

12. (1) Show that the sub-tangent of a parabola is bisected at the
vertex.

(2) If the tangent at P meets the tangent at the vertex in Y,
prove that $AY^2 = AS.AN$, where PN is the ordinate of P.

13. (1) The tangents to an ellipse at the ends of a diameter are
parallel to the system of chords bisected by the diameter.

(2) Show that the line joining the points of contact of two
parallel tangents is a diameter.

14. (1) The tangents at the ends of a focal chord of an ellipse inter-
sect on the directrix.

(2) By drawing the tangent at B, prove that

$$CS.CX = CA^2.$$

15. (1) Prove that the projection of straight a line on a plane
is itself a straight line.

(2) The angle which a straight line makes with its projection　7
on a plane is less than that which it makes with any other straight
line which meets it in that plane.

16. If two straight lines are parallel, and if one of them is per-　16
pendicular to a plane, prove that the other is also perpendicular to
the same plane.

17. . In a tri-hedral angle the sum of any two of the face angles is　16 ᐧ
greater than the third.

MATHEMATICS.

SECOND PAPER.

Examiners—⎰BABU SITESCHANDRA KAR.
BABU NARESCHANDRA GHOSH.
BABU MUKTIDARANJAN RAY.
BABU NAGENDRANATH SWARNAKAR.
BABU BANKIMDAS BANERJEE.
BABU DEBAPRASAD GHOSH.
BABU NALINIMOHAN BOSE.
BABU SATYENDRANATH BOSE.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions are of equal numerical value.

Two marks are reserved for neatness.

Not more than SEVEN *questions are to be attempted.*

1. (1) Explain the meaning of the expression ' rate of displacement.'
How would you represent it graphically, when it is constant ?

(2) A particle moves through 5 ft. in 2·5 seconds. Find its velo-
city in centimetres per minute.

(1 ft. = 30·4 cm. nearly.)

2. (1) Prove graphically that the space described by a particle, whose
velocity changes uniformly, in time t is $\frac{1}{2}(u+v)t$, where u is the initial
and v the final velocity.

(2) The velocity of a particle at the end of 0·04, 0·08, 0·12 hour is
2·4, 4·8, 7·2 miles per hour respectively. Find the space described in
1 hour.

3. (1) Prove the formula $v^2-u^2=2fs$, where v is the final and u the
initial velocity, under an acceleration f, the distance traversed being s.

(2) A particle is projected vertically upwards with a velocity of
64 ft. per second. Find the height of the highest point reached.

4. (1) State and prove the principle of parallelogram of velocities.
Hence show how the relative velocity of one body with respect to another
may be determined.

(2) Two trains, each 200 ft. long, are moving in parallel lines with velocities of 20 and 30 miles an hour respectively *in the same direction.* How long will they be in passing ?

5. State Newton's third law of motion.
Prove that in the case of direct impact of two spheres, the total momentum of the bodies remains unchanged.

6. (1) A particle is projected horizontally from the top of a tower. Prove that its path is a parabola.
(2) Find the velocity of projection, if the height of the tower is 144 ft. and if the particle reaches the ground at a distance of 60 ft. from the bottom

7. (1) Explain how masses and forces are measured.
(2) Two particles are connected by a light inextensible string passing over a smooth fixed pulley. If the system moves with an acceleration of 109 cm. per second per second ($g=981$), compare the masses of the particles.

8. (1) State and prove the principle of triangle of forces.
(2) The magnitude and direction of a certain force is given, as well as the direction of a second force. If the magnitude of the resultant is also given, find its direction.

9. (1) Show how to reduce any number of forces in a plane to a single force and a single couple.
(2) Deduce the conditions of equilibrium of a body under any number of forces in a plane.

10. (1) Explain how you would find the centre of gravity of a triangular lamina experimentally. Where would the centre of gravity be if the body be a uniformly thick triangular board ?
(2) On the base of an isosceles triangle (height 3 ft. and base 2 ft.) an equilateral triangle is described. Find the position of the centre of gravity of the figure formed by the two triangles.

11. (1) Show how to find the resultant of two parallel forces when they are unlike.
(2) Parallel forces, each equal to P, act at the angular points of a square. Find the magnitude and point of application of the resultant.

12. (1) Explain the meaning of the expressions ' limiting friction ' and ' coefficient of friction.' How would you experimentally determine this coefficient ?
(2) A heavy rod rests with one end on a rough horizontal plane and the other end against a smooth vertical wall. Find the condition of equilibrium.

13. Define a ' foot-pound.' Express a foot-pound in terms of an erg, given

$$1 \text{ lb.} = 453 \cdot 6 \text{ grammes nearly,}$$
$$1 \text{ ft.} = 30 \cdot 48 \text{ cm. nearly,}$$
$$g = 32 \text{ ft. per second per second.}$$

14. (1) Define ' power ' and ' weight.' What do you understand by ' mechanical advantage ' ?
(2) Describe ' the wheel and the axle,' and find its mechanical advantage.

15. (1) Prove that the kinetic energy acquired by a particle falling freely under gravity is equal to the work done by gravity.
(2) A body falls from a height of 30 ft. Find its kinetic energy at the moment it strikes the ground, if the mass of the body is 20 lb.

PHYSICS.

Paper-setters—
{ Babu Ramendrasundar Trivedi, M.A.
Dr. D. N. Mallik, B.A., Sc.D., F.R.S.E.
Rai Kumudinikanta Banerjee, Bahadur
M.A.

*Head Examiner—*Babu Ramendrasundar Trivedi, M.A.

First Paper.

Examiners—
{ Babu Rajkumar Banerjee, M.A.
Babu Gangadhar Mukherjee, M.A.
Babu Nibaranchandra Ray, M.A.
Babu Manorathadhan De, M.A.
Babu Rajanikanta De, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

Not more than seven *questions to be attempted.*

The questions are of equal numerical value.

1. Distinguish between potential and kinetic energy with illustrations.

A railway train is going uphill with a constant velocity. What is the source from which the energy of the train is supplied ?

Describe the various transformations of energy that go on in this case.

2. Explain clearly what you understand by atmospheric pressure.

Describe experiments to prove the existence of atmospheric pressure. How is it determined ? If it is equal to that of 32 inches of mercury, find its magnitude. [Density of mercury=13·6.]

3. Describe a method of determining the specific gravity of a liquid.

A Nicholson's hydrometer sinks to a certain mark in a liquid of specific gravity 0·6; but it takes 120 grammes to sink it to the same mark in water. What is the weight of the hydrometer ?

4. Explain what you mean by latent heat of fusion.

Find the latent heat of fusion of ice from the following data : —

Weight of the calorimeter = 60 grammes.
Weight of calorimeter and water = 460 grammes.
Temperature of water (before ice is put in) = 38°C.
Temperature of the mixture = 5°C.
Weight of the calorimeter, water, and ice =618 grammes.
Specific heat of the calorimeter = 0·1.

5. State the law connecting the volume, pressure, and temperature of a gas.

At what temperature would the volume of a gas be doubled if the pressure at the same time increase from that of 700 to 800 millimetres of mercury ?

6. Define specific heat. Describe an experiment to determine the water equivalent of a copper calorimeter and the specific heat of copper.

7. Define the coefficients of linear and cubical expansion. How is the coefficient of linear expansion determined in the case of a solid ?

A cube whose sides are each 100 cm. at 0°C. is raised to 100°C. If the sides become each 101 cm., find the coefficients of linear and cubical expansion.

8. A vibrating tuning-fork is placed at the mouth of an open jar, and water is poured into the jar gradually. Explain what will happen.

Explain how you would determine the velocity of sound in air by an experiment of this kind.

9. Describe the motion of a sounding body. How would you demonstrate the nature of this motion experimentally ?

Explain, as far as you can, the mode of propagation of sound through air.

PHYSICS.

Second Paper.

Examiners— ⎰ Babu Radhikamohan Chaudhuri, M.A.
⎰ Babu Radhagobinda Bhawani, M.A.
⎰. Babu Sushilchandra Chakrabarti, M.A.
⎰ Babu Jogeschandra Mukherjee, M.A.
⎰ Babu Bhabataran Brahmachari, M.A.

Candidates are required to give their answers in their own words as far as practicable.

Not more than SEVEN *questions to be attempted.*

The questions are of equal numerical value.

1. Distinguish between umbra and penumbra.

Indicate the formation of umbra and penumbra due to a spherical obstacle, when the source of light is a luminous sphere, (a) when the latter is larger than the obstacle, (b) when it is smaller, (c) when the spheres are equal.

2. A rod is placed at a considerable distance from a concave reflecting mirror, and perpendicular to its axis. Describe by means of suitable diagrams the changes in its image as the rod is made to approach the mirror, parallel to itself, till it is very near the mirror.

3. Define the following terms : Principal focus, virtual image.

Illustrate the meaning of each of these terms by means of diagrams, in the case of a convex lens.

A rod 5 cm. long is held in front of a convex lens and forms an image 25 cm. long upon a screen (placed parallel to the rod) at a distance of 100 cm. from the lens. What is the focal length of the lens ?

4. Describe and explain the use of a spectroscope.

Describe a solar spectrum.

5. Describe (a) the construction and the mode of action of an electrophorus, (b) a gold-leaf electroscope.

6. Two similar deep metal jars are placed on the caps of two similar .electroscopes at some distance apart, the caps being connected by a fine wire.

(a) A positively electrified ball is lowered into one of the jars without touching the sides.

(b) The wire connexion is broken by means of a silk thread.

(c) The ball is removed without touching the sides.

Explain the effects observed on the two sets of gold leaves.

7. State Ohm's law.

Two cells, each having a resistance of 2 ohms and an E.M.F. of 1·5 volts, are connected in series to the binding screws of a galvanometer having a resistance of 7 ohms. Find the current passing through the circuit. If the binding screws are also connected by a resistance of 7 ohms, how is the current through the galvanometer affected ?

8. Describe the construction of a tangent galvanometer.

A circuit includes a water voltameter and a tangent galvanometer. State the relation between the deflexions of the galvanometer and the amounts of hydrogen liberated.

9. Explain the action of ʻBarlow's Wheel,' or any arrangement for producing continuous rotation by electrical means. Describe typical experiments which support the explanation you give.

10. Describe the construction of an electromagnet. How does it differ in construction and action from (a) a natural magnet (b) an artificial magnet ?

How would you use it to demonstrate the nature of induced currents ?

CHEMISTRY.

Paper-setters—
RAI CHUNILAL BASU, BAHADUR, M.B., F.C.S.
DR. P. C. MITTER, M.A., PH.D.
BABU JYOTIBHUSHAN BHADURI, M.A.

Head Examiner—BABU JYOTIBHUSHAN BHADURI, M.A.

FIRST PAPER.

Examiners—
BABU ASUTOSH MAITRA.
BABU HARIDAS MUKHERJEE.
BABU KSHITISCHANDRA RAY.
MR. B. K. SINGH.
BABU JATINDRAMOHAN DATTA.
BABU PRIYADARANJAN RAY.
BABU JOGESCHANDRA GHOSH.
BABU JNANENDRACHANDRA GHOSH.
BABU JNANENDRANATH MUKHERJEE.
BABU ANANDAKISOR DAS.
MR. K. G. NAYAK.
BABU SATISCHANDRA MUKHERJEE

Candidates are required to give their answers in their own words as far as practicable.

Not more than SIX questions to be attempted.

The questions are all of equal numerical value.

1. Explain the law of chemical combination by *volume,* and illustrate your answer by three examples.
100 c.c. of marsh gas at 27° and 750 mm. are exploded with an excess of oxygen. Determine the weight of water and the volume of carbon dioxide formed at N.T.P.

2. A bottle of muddy river water is given to you. How would you proceed to prepare a sample of pure water from it, and how would you obtain the soluble and insoluble impurities present in it ? Sketch the apparatus you would use.

3. How does sulphur occur in nature ? How is it ordinarily obtained ? Describe its allotropic modification, and show how would obtain a sample of chemically pure sulphur.

4. Describe how nitric acid is obtained, and mention the impurities usually found in the acid. How would you obtain from it (*a*) oxygen, (*b*) nitrogen, and (*c*) ammonia ?

5. If quicklime be exposed to air what chemical changes do you suppose will occur, and what substance will be left after the lapse of considerable time ? What would be the action on the residue of (*a*) heat, (*b*) pure water, (*c*) aqueous solution of carbon dioxide, and (*d*) dilute hydrochloric aicd ? Give equations.

6. How are the following substances prepared : (a) copper nitrate, (b) ferric chloride, (c) pure sodium chloride : (d) magnesium sulphate ? Describe their properties and uses, and give one test only for the basic and acidic radicals in each.

7. A solution of sodium hydrate is prepared containing 4·74 grammes of that· solid per litre. Calculate the volume of hydrogen chloride at N.T.P. which, when dissolved in water, will neutralize 60 c.c. of the alkali solution.

$$(Na=23.   Cl=35·5.)$$

CHEMISTRY.

SECOND PAPER.

Examiners— {
BABU DHIRENDRANATH MUKHERJEE.
BABU PHANIBHUSHAN CHATTERJEE.
BABU PRIYABRATA SARKAR.
BABU SARATCHANDRA JANA.
DR. D. N. CHAKRABARTI.
BABU SATISCHANDRA GANGULI.
BABU SURYYANARAYAN SEN.
BABU RAMESCHANDRA CHAKRABARTI.
DR. SUDHAMAY GHOSH.
BABU KUMUDNATH CHAUDHURI.
BABU JNANENDRANATH SEN.
BABU PHANINDRANATH DAS.
}

Candidates are required to give their answers in their own words as far as practicable.

Not more than SIX *questions may be attempted.*

The questions are all of equal numerical value.

1. A compound containing sodium, sulphur, oxygen, and hydrogen gave on analysis the following result:—

$$Na=14·31 \text{ per cent.}$$
$$S= 9·97 \text{ ,, ,,}$$
$$H= 6·25 \text{ ,, ,}$$
$$O=69·47 \text{ ,, ,,}$$

Calculate the formula on the assumption that all the hydrogen in the compound is present in combination with oxygen as water of crystallization.

Explain the principles involved in the calculation.

$$(Na=23.   S=32.   O=16.)$$

2. What are the normal consitituents of the atmosphere ? Give reasons for considering that air is a mechanical mixture and not a chemical compound.

3. Describe fully how you would determine the composition of ammonia by *volume.*

4. How would you prepare sulphuretted hydrogen ? What are its usual impurities, and how would you obtain the pure gas ? Sketch the apparatus you would use.

Explain fully the use of this gas as an analytical reagent.

5. How are the following substances prepared:—(a) wood charcoal, (b) animal charcoal, (c) gas carbon, and (d) soot ?

What are their properties and principal uses ?

6. In what respect is it unsatisfactory to say that 'on heating zinc a white powder is formed from it.' What is the true explanation of the formation of the white powder, and what experiments would you perform in support of your answer ?

7. State the properties and chief uses of metallic copper and its oxides. How are the oxides prepared ?

₁BOTANY.

Paper-sellers— { S. C. MAHALANOBIS, ESQ., B.SC., F.R.S.E.
C. C. CALDER, ESQ., B.SC.

FIRST PAPER.

Examiners— { BABU SAHAYRAM BOSE, M.A.
MOTHER DOLORES KNIGHT, B.A., B.T.

Candidates are required to give their answers in their own words as far as practicable.

Answer FIVE questions only.

The questions carry equal marks.

1. Write a short essay on vegetative reproduction among flowering plants, giving examples.

2. Describe the processes which lead to the conversion of an ovule into a seed, and state what is the difference between albuminous and exalbuminous seeds.

3. Give a short summary of the various contrivances favouring the cross fertilisation of flowers.

4. What do you understand by "alternation of generations' ? Does this phenomenon occur among flowering plants ?

5. Describe as fully as you can *any one* of the following families:—

(a) Compositae.
(b) Acanthaceae.
(c) Graminaceae.

6. Give an account of the life-history, with special reference to the mode of reproduction, of any fungus you have examined.

7. What is respiration ? Describe some simple experiment by which you can prove that plants breathe.

BOTANY.

SECOND PAPER.

Examiners—{ BABU HARENDRANATH MITRA, M.A.
BABU SATYASARAN SINHA, B.SC. (*Illinois*).

*Candidates are required to give their answers in their own words
as far as practicable.*

Only FIVE *questions are to be answered.*

The questions are of equal numerical value.

1. Describe the structure of the transverse section of a dicotyledonous stem in which secondary thickening has just commenced.
2. How does a plant take in food materials from the soil ?
3. Describe the various parts of a leaf and give an account of the modifications they may undergo.
•4. Give an account of the various contents of a growing cell.
5. What is meant by venation of leaves ? Give an account of the parallel type of venation.
6. Give a comparative account of the inflorescences of the mustard. the wheat and the cockscomb.
7. What is a fruit ? How do you distinguish true fruits from spurious ones ? Illustrate your answer by examples.

PHYSIOLOGY.

Paper-setters—{ HON. SIR NILRATAN SARKAR, KT., M.A., M D.
RAI BAHADUR DR. UPENDRANATH BRAHMA-
CHARI, M.A, M.D., PH.D.
MAJOR D. MCCAY. M.B., I.M.S.

FIRST PAPER.

Examiner—DR. B. C. GHOSH, M.A., M.B., B.C., (*Cantab*).

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions are of the same numerical value.

Not more than FOUR *questions to be answered.*

1. Write a careful note on the blood, stating what you know regarding the histology of the corpuscles of the blood.
2. Give a short account of the changes that take place in muscle during contraction.

3. What are the causes of the sounds of the heart ?   Trace the course of the flow of blood through the heart.
4. Describe the mechanism of respiration.
5. Describe the digestion and absorption of starchy foods, mentioning the different secretions that assist in the digestion and absorption of starch.

PHYSIOLOGY.

SECOND PAPER.

Examiner—BABU NIBARANCHANDRA BHATTACHARYYA, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of the same numerical value.

Not more than FOUR questions to be attempted.

1. What are the lacteals ?   What is the difference between Chyme and Chyle ?
2. What is the difference in function between the anterior and posterior nerve roots ?
3. What is a reflex action ?   Give an example and trace the afferent and efferent paths of the nervous impulses calling forth the reflex.
4. Write a careful note on the functions of the spinal cord.
5. State what you know regarding the sense of taste.

GEOGRAPHY.

Paper-setters—{ BABU JNANCHANDRA GHOSH, M.A.
F. W. PAPWORTH, ESQ., B.A.
A. MERCER, ESQ., B.SC.

Examiner—BABU SARATLAL BISWAS, M.SC.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

Candidates are to answer Questions 1 and 10, and any FOUR, but not more than FOUR, of the other questions.

The figures in the margin indicate full marks.

1. Describe carefully the country represented upon map *A*.   Upon   20
the map draw carefully in ink the course of the main stream flowing
past *S*. Draw a section of the country from *X* to *Y*, and estimate
whether *Z* is visible from *S*.

2. Write a careful note upon the type of climate which is known as 'Mediterranean,' stating the chief vegetable products of this type and where it is met with.

3. Give an account of the origin and movements of cyclones. What do you understand by an anticyclone ?

4. Describe the steps you would take to enlarge a given map. Suppose that you were given a particular map drawn upon a scale 4 inches to 1 mile, show how you would reduce this map to half the size.

5. Give an account of the construction and the working of a mercury barometer (illustrate your answer by diagrams). How does this differ from an aneroid barometer ? Explain how the instrument may be used to guage the height of a mountain.

6. Explain, using illustrative diagrams, the theory of the tides round the world. Why are those tides sometimes higher than at other times, and why are they generally later from day to day ?

7. Study the undernoted tables of imports and exports, and state (a) what are the chief raw materials and unmanufactured articles referred to in I, (b) what are the chief articles wholly or mainly manufactured referred to in II. Study these figures and write a carefully considered note as to the conclusions which a study of these figures leads you to make.

IMPERIAL TRADE.

I. IMPORTS INTO THE UNITED KINGDOM.

Items.	1911 £ (thousands)	1912 £ (thousands)	1913 £ (thousands)	1914 £ (thousands)	1915 £ (thousands)
Raw Materials and Articles mainly unmanufactured :—					
Consigned from Foreign countries	171,227	192,528	190,283	153,015	158,193
Consigned from British Possessions	76,931	83,139	91,538	83,515	42,356
Total	248,158	275,667	281,321	236,530	200,500

II. EXPORTS OF UNITED KINGDOM.

	1911 £ (thousands)	1912 £ (thousands)	1913 £ (thousands)	1914. £ (thousands)	1915 £ (thousands)
Articles wholly or mainly manufactured :—					
To Foreign countries	221,838	228,470	237,540	186,482	166,496
To British Possession	140,383	156,558	173,828	152,151	126,430
Total	362,221	385,028	411,368	338,633	292,926

8. Point out the remarkable difference between the climates of Southern and Northern France, seeing that these countries are in the same latitude. Explain the reason of this and show how this difference of climate causes the vegetable products and the occupations of the people to be of so diverse a character.

9   When it is 12 noon at Bombay what is the time at (a) Basra,   15
(b) Calcutta, (c) Singapore ?

| Bombay 73°E. | Calcutta 88°E. |
| Basra 47°E. | Singapore 103½°E. |

10.   Upon the map B, of Asia, with which you are provided, the   20
isobars have been marked for the summer.   Mark with arrows the di
rections in which the winds blow during the months from April to
July, and show by means of different types of shading the rainfall
which the continent receives during the summer,   Mark and name the
principal ocean currents which wash the Pacific coast of Asia.   What bea
ring have these upon the climate ?

GEOGRAPHY.

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

*Candidates are to answer Question 1, and any FIVE, but not
more than FIVE, other questions.*

The figures in the margin indicate full marks.

1.   Upon the accompanying map of the world insert and name the   20
following:—
      (a) Lille, Bagdad, Colombo, Melbourne, Canton, Trieste, Bor
deaux, Pittsburg, Essen, Karachi, Basra, Leeds.
      (b) The chief ports on the Atlantic Ocean, and the trade routes
which connect them.
      (c) The mountains which form the land boundaries of India,
Burmah, and the chief mountain passes through which communication
intercourse is maintained with the neighbouring countries.
2.   Name the chief markets for Australian flour, gold, hides, skins,   16
horses, and wool.
3.   Give an account of the principal coalfields at present worked in   16
South Africa, the principal markets for the coal produced,   the
means of transport to those markets.
4.   Describe carefully the basin of the Yang-tse-kiang.   What mea   16
sure of its commercial importance does China owe to the three rivers—
the Yang-tse-kiang, the Hoang-ho, the Si-kiang ?
5.   Draw a map of India and indicate upon it the principal centers   16
of manufacture, and the localities where her chief mineral and vegor
able products are obtained.
6.   Describe the foreign trade of Japan.   Sketch the main lines of   16
its transport, and state what commercial developments are likely to
take place in the future.
7.   Briefly compare South America with Africa in respect to con   16
figuration, elevation, slope, positions of mountains and rivers, density
of population, and probable rapidity of industrial development.
8.   What are the chief exports and imports of New Zealand, and   16
where are the chief seaports situated ?

9. Contrast the natural and commercial resources of Canada and   16
the United States.

10, What are the principal food imports of the British Isles ?   State   16
where they respectively come from.

11. Write a short note on *seven* of the following places.   State what   16
geographical conditions, if any, have contributed to the growth of
their importance :—Chicago, Tokio, Calcutta, Singapore, Bombay,
Constantinople, Marseilles, Calais, Liverpool, and Hamburg.

𝕭.𝕬. 𝕰xamination.

1918.

ENGLISH.

Paper-setters –
(Pass and Honours).

{
J. N. Das Gupta, Esq., B.A. (*Oxon*).
Dr. H. Stephen, M.A., D.D.
Rev. Dr. G. Howells, M.A., Ph.D.,
 B Litt., B.D.
Rev. Father F. X. Crohan, S.J.
Dr. H. C. Mukherjee, M.A., Ph.D.
}

First Honours Paper.

Examiner—T. S. Sterling, Esq., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Candidates are to answer Questions 5 and 10, two *of the
Questions* 1-4, *and* two *of the Questions* 6-9.

1. ' The English Drama as we have it in Shakespeare was the slow   13
growth of several centuries.'   Expand this statement.

2.   In Portia Shakespeare seems to have tried what he could do in   13
working out a scheme of an amiable, intelligent, and accomplished
woman.'   Comment on this remark, and give illustrative references.

3.   Write a critical review of the main problems connected with the   13
interpretation of the Tragedy of Macbeth.

4.   Discuss the *Merchant of Venice* and *Macbeth* from the stand-   13
point of their bearing on the growth of Shakespeare's mind and art.

5.   Explain and annotate, in connexion with their contexts, *any*   24
three of the following passages :—

(*a*) If Hercules and Lichas play at dice
  Which is the better man, the greater throw
  May turn by fortune from the weaker hand:
  So is Alcedis beaten by his page ;
  So may I, blind fortune leading me,
  Miss that which one unworthier may attain
  And die with grieving.

(*b*)   The poet
  Did feign that Orpheus drew trees, stones and floods.

Since nought so stockish, hard and full of rage
But music for the time doth change his nature.
The man that hath no music in himself
Nor is not moved with concord of sweet sounds,
Is fit for treasons, stratagems and spoils;
The motions of his spirit are dull as night,
And his affections dark as Erebus:
Let no such man be trusted.

(c) My Genius is rebuked; as, it is said,
Mark Antony's was by Caesar. He chid the sisters
When first they put the name of king upon me,
And bade them speak to him: then prophet-like
They hailed him father to a line of kings:
Upon my head they placed a fruitless crown
And put a barren sceptre in my gripe
Thence to be wrenched with an unlineal hand
No son of mine succeeding.

(d) Bring me no more reports; let them fly all:
Till Birnam wood remove to Dunsinane,
I cannot taint with fear. What's the boy Malcolm?
Was he not born of woman? The spirits that know
All mortal consequences have pronounced me thus:
Fear not, Macbeth; no man that's born of woman
Shall e'er have power upon thee. Then fly, false thanes,
And mingle with the English epciures:
The mind I sway by and the heart I bear
Shall never sag with doubt nor shake with fear.

6. Indicate the sources of *Paradise Lost*, and critically discuss   13
Milton's treatment of his subject.

7. Trace the general argument of *Paradise Lost*, Books III and IV,   13
and discuss the personalty and character of Satan as portrayed
therein.

8. Write a critical estimate of Byron, the man and the poet.   13

9. 'Childe Harold is full of the poet's self.' Justify this, stated   13
more especially in reference to Cantos III and IV.

10. Annotate, with reference to their respective contexts, the fol-   24
lowing passages:—

(a) Blind Thamyris and blind Maeonides
And Tiresias and Phineas, prophets old.

(b) Embryos and idiots, eremites and friars
White, black and grey with all their trumpery.

(c) So clomb this first grand thief into God's fold,
So since into His church lewd hirelings climb.

(d) While Waterloo with Cannae's carnage vies,
Morat and Marathon twin names shall stand.

(e) Lausanne! and Ferney! ye have been the abodes
Of names which unto you bequeath'd a name.

(f) But thou, of temples old, or altars new
Standest alone, with nothing like to thee—
Worthiest of God, the holy and the true.

ENGLISH.

Second Honours Paper.

Examiner—Dr. H. C. Mukherjee, M.A., Ph.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Either,

1. 'There is more of Shakespeare in this amazing character (Fal- 16
staff) than in all the poetry of *Richard II.*'

How does Raleigh prove the above statement ?

Or,

How does Shakespeare utilize his knowledge of contemporary life
and manners for the characters and incidents of his plays ?

2. Examine *any two* of the following statements :— 16

(*a*) 'Shakespeare sacrifices virtue to convenience, and is so much
more careful to please than to instruct, that he seems to write with-
out any moral purpose.' (Johnson).

(*b*) 'One wonders what Heminge and Condell would have thought
if they had applied to Shakespeare for a new comedy, and the great
dramatist had told them that he could not possibly comply with
their wishes, he being then in his Tragic Period.' (Halliwell-
Phillipps).

(*c*) '*Measure for Measure* is a play as full of genius as it is of
wisdom. Yet there is an original sin in the nature of the subject,
which prevents us from taking a cordial interest in it.' (Hazlitt).

3. Explain *any three* of the following :— 18

(*a*) Shakespeare's villains and evil characters belong to the ter-
rible army of cripples, who employ the best skill of their four senses
to avenge upon others the loss of a fifth.

(*b*) Shakespeare exhibits beauty as Marlowe exhibits power, freed
from all realistic human conditions.

(*c*) Poetry, like religion, is outraged when it is made a platform
for the exhibition of their own talent and passion by those who are
its ministers.

(*d*) Miranda, that is to say, is Prospero's Miranda.

(*e*) The brain that devised *The Tempest* was not unstrung by
fatigue.
                         Either,

4. '*The Waverley Novels* do not portray character but action.' 13

How far is this true of *A Legend of Montrose* ?

Or,

Discuss and explain the statement, 'Dugald Dalgetty is to *A
Legend of Montrose* what Falstaff is to *Henry IV.*'

5. Explain, with reference to the context, *any two* of the follow- 12
ing :—

(*a*) To use the canting phrase of the saints in the English Parlia-
ment, the sons of Zeruiah are still too many for us.

(*b*) He mentioned the celebrated settlement of the Fife Under-takers in the Lewis, as part of a deliberate plan, formed to introduce strangers among the Celtic tribes.

(*c*) I could wish that the fair Briseis were removed from our camp before the return of our Highland Achilles.

Either,

6. Write a short note on the mysticism of Blake, illustrating it by references to your text.

13

Or,

Compare the letters of Lamb and Scott as illustrations of self-revelation.

7. Explain, with reference to the context, *any two* of the follow-ing:—

12

(*a*) It is here that the swarthy daughters of Cadmus may hang their trophies on high.

(*b*) I declined to try avoiding the imprisonment by the help of Perry's offer of the famous secret ' Book.'

(*c*) I have never heard anything of Ada, the little Electra of my Mycenae.

ENGLISH.

THIRD HONOURS PAPER.

Examiner—REV. DR. G. HOWELLS, M.A., PH.D., B.LITT.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Give in your own words the substance of the following passage, and comment on what you consider to be its leading idea:—

25

If the power of speech is a gift as great as any that can be named, —if the origin of language is by many philosophers even considered to be nothing short of divine,—if by means of words the secrets of the heart are brought to light, pain of soul is relieved, hidden grief is carried off, sympathy conveyed, counsel imparted, and wisdom per-petuated, if by great authors the many are drawn up into unity, national character is fixed, a people speaks, the past and the future, the East and the West, are brought into communication with each other,—if such men are, in a word, the spokesmen and prophets of the human family,—it will not answer to make light of literature or to neglect its study; rather we may be sure that, in proportion as we master it, in whatever language, and imbibe its spirit, we shall our-selves become in our own measure the ministers of like benefits to others, be they many or few, be they in the obscurer or the more dis-tinguished walks of life, who are united to us by social ties, and are within the sphere of our personal influence.

2. Indicate and elucidate the purport of *one* of the following:—

25

(*a*) Our thoughts are greater than ourselves, our dreams
   Ofttimes more solid than our acts: our hope
   With more of substance and of shadow teems
   Than our thin joys, and hath a nobler scope.

O sons of men! there is a Presence here,
Here in our undying spirits, which
With an unearthly wealth doth oft enrich
The reason hourly sanctified by fear.
Herewith men prophesy, herewith men press
To their own hearts in studious loneliness
Forms greater than they dare to tell: beneath
The shadow of their own imaginings
They sit, withdrawn and sheltered; for a wreath
Encircles them, a wreath of Angels' wings.

(b) The sea awoke at midnight from its sleep,
And round the pebbly beaches far and wide,
I heard the first wave of the rising tide
Rush onward with uninterrupted sweep—
A voice out of the silence of the deep,
A sound mysteriously multiplied
As of a cataract from the mountain's side
Or roar of winds upon a wooded steep.
So comes to us at times, from the unknown
And inaccessible solitudes of being,
The rushing of the sea-tides of the soul;
And inspirations, that we deem our own,
Are some divine foreshadowing and foreseeing
Of things beyond our reason or control.

3.   Write an Essay on *one* of the following subjects :—   50
   (a) The profession of arms.
   (b) Possibilities of the moral, intellectual, and material advance-
ment of the world during the twentieth century.
   (c) The influence of a great humorist on the men and women of
his time.
   (d) The woman's cause is man's; they rise or sink
      Together, dwarfed or God-like, bond or free ;
      If she be small, slight-natured, miserable,
      How shall man grow ?

ENGLISH.

Fourth Honours' Paper.

Examiner—Rev. Father F. X. Crohan, S.J.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Either,

1.   What indications do you gather from the style and general tone   10
of *The Tempest* as to its position, in point of time, among Shakes-
peare's plays ?   *Or,*

   Give a brief description of the Masque included in *The Tempest*,
indicating clearly at what stage in the play it is introduced. What
do you gather from it as to the characteristic features of a Masque ?

2. Give the context of, and explain where necessary, the follow- 15
ing passages :—

(a) I find my zenith doth depend upon
A most auspicious star, whose influence
If now I court not but omit, my fortunes
Will ever after droop.
(b) The latter end of his commonwealth forgets the beginning.
(c) This is the tune of our catch, played by the picture of No-
body.
(d)   Graves at my command
Have waked their sleepers, oped, and let them forth.
(e) And my ending is despair,
Unless I be relieved by prayer,
Which pierces so that it assaults
Mercy itself and frees all faults.

3. Annotate the following passage, and state its leading idea, as 15
also its bearing on the play :—

How am I glutted with conceit of this !
Shall I make spirits fetch me what I please.
Resolve me of all ambiguities,   .
Perform what desperate enterprise ᵬ will ?
I'll have them fly to India for gold, ˙
Ransack the Ocean for orient pearl,
And search all corners of the new-found world
For pleasant fruits and princely delicates :
I'll have them read me strange philosophy,
And tell the secrets of all foreign kings . . .
I'll have them fill the public schools with silk
Wherewith the students shall be bravely clad :
I'll levy soldiers with the coin they bring
And chase the Prince of Parma from our land
And reign sole king of all our provinces.

Either,

4. Hazlitt says : ' The character of Faustus may be considered as a 10
personification of the pride of will and eagerness of curiosity sub-
limed beyond the reach of fear and remorse.' Discuss this statement
by references to the play.   *Or*,

Write a note on Marlowe as a dramatist. Name his chief plays
and mention any special influence they have had on literature.

5. Comment on the following passages :—   9

(a) Fairer than Phoebe's sapphire-region'd star,
Or Vesper, amorous glow-worm of the sky.
(b) Nor suffer thy pale forehead to be kissed
By nightshade, ruby grape of Proserpine.
(c) For I would not be dieted with praise,
A pet-lamb in a sentimental farce !

6. (a) What are the special characteristics of Keats's odes ? How 8
may they be classified ?   *Either*,

(b) Remark on the Greek element in the *Ode to Psyche*.   8

Or,

What points of contrast does the *Ode to Autumn* offer, when com-
pared with the other odes of Keats ?

7. Explain carefully the following passages:—

(a) Stop and consider ! life is but a day:
A fragile dew-drop on its perilous way
From a tree's summit ; a poor Indian's sleep
While his boat hastens to the monstrous steep
Of Montmorenci. Why so sad a moan ?
Life is the rose's hope while yet unblown:
The reading of an ever-changing tale ;
The light uplifting of a maiden's veil ;
A pigeon tumbling in clear summer air ;
A laughing school-boy, without grief or care,
Riding the springy branches of an elm.

(b) Far as the mariner on highest mast
Can see all round upon the calmed vast,
So wide was Neptune's hall : and as the blue
Doth vault the waters, so the waters drew
Their doming curtains high, magnificent,   .
Aw'd from the throne aloof ;—and when storm-rent
Disclos'd the thunder gloomings in Jove's air ;
But sooth'd as now, flashed sudden everywhere,
Noiseless, sub-marine cloudlets, glittering
Death to a human eye : for there did spring
From natural west, and east, and south, and north,
A light as of four sunsets, blazing forth
A gold-green zenith 'bove the Sea God's head.

ENGLISH.

FIFTH HONOURS PAPER.

Examiner—A. CAMERON, ESQ.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

GROUP A.

Answer any THREE *questions.*

1. Write a critical appreciation of Landor's dramatic power as   15
seen in his grouping of characters and choice of situations.

2. " Dear Addison ! deliberate, moral, sentimental, foaming over   15
with truth and virtue, with tenderness and friendship." How far
is this a correct characterisation of Addison ?

Or,

Describe the character of Peter the Great as seen in the imaginary
conversation between him and Alemis

3. Write a brief note, critical and explanatory, on what you con-   15 ˙
sider to be Landor's ideal of womanhood as seen in his presentation
of the character of Lady Jane Grey.

4. **Expand with reference to the context** *any four* of the follow- 15
ing :—

(*a*) A solitude is the audience-chamber of God.

(*b*) I serve at a tavern where every hour is dinner-time, and pick
a bone upon a silver dish.

(*c*) Faith ! I am mortified : you the schoolman, I the schoolboy !

(*d*) I am not dissatisfied, on the whole, with my *Mask of Comus*,
yet there the scholar in his gown stood in the poet's way.

(*e*) We are a miscellaneous volume, the leaves well sewed to-
gether,—Roman, Norwegian, Dane, Saxon, chapter after chapter.

Or,

Annotate the following with reference to the context :—

(*a*) Mere talents are dry leaves, tossed up and down by gusts
of passion, and scattered and swept away, but Genius lies on the
bosom of Memory, and Gratitude at her feet.

(*b*) To the voice of compassion not a shell in all the ocean is
attuned ; and no tear ever dropped upon Olympus.

(*c*) He sang to me over the lyre the lives of Narcissus and Hya-
cinthus, brought back by the beautiful Hours, of silent unwearied feet,
regular as the stars in their courses.

Group B.

Answer any two *questions.*

5. Give the substance of the letter which Dr. Johnson wrote to 15
the Earl of Chesterfield on the eve of the publication of his *Diction-
ary.* Elucidate the significance of the letter in the history of English
Literature.

6. What do you gather from your text regarding— 15

(*a*) the reception of *Gulliver's Travels* by the contemporaries
of *Gulliver* ;

(*b*) the views of Addison about Pope's plan of a translation of
Homer ; and

(*c*) the views of Lady Mary Montague on the subject of the
education of her granddaughter ?

7. Explain the following with reference to the context : — 15

(*a*) Books are the shrines where the saint is, or is believed to be ;
and you have built an Ark to save learning from deluge.

(*b*) Our passions, our interests, flow in upon us and unphilo-
sophise us into mere mortals.

(*c*) The world is made for Caesar.

Group C.

8. Give the substance of the following passages, bringing out in 25
each case what you consider to be the leading idea of the passages :—

(*a*) Man is not the creature of circumstances. Circumstances
are the creatures of men. We are free agents, and man is more
powerful than matter. Truth may be distorted, may be stifled, be
suppressed. The invention of cunning deceits may, and in most
instances does, prevent man from exercising his own powers. They
have made him responsible to a realm of shadows, and a suitor in a
court of shades. He is ever dreading authority which does not exist,
and fearing the occurrence of penalties which there are none to
enforce. But the mind that dares to extricate itself from these

vulgar prejudices, that proves its loyalty to its Creator by devoting all its adoration to His glory ; such a spirit as this becomes a master mind, and that master mind will invariably find that circumstances are its slaves.

(b) There is an old saying that to live is to outlive. This is not to tell us that " from the tablet should be abolished quite the cheerful past." It means no more than that Ideals have their hours and fade. The oracle of to-day drops from his tripod on the morrow. In common lives of human thought and act, as in the business of the elements, winds shift, tides ebb and flow, the boat swings. Only let the anchor hold. We should not cast our horscopes too narrowly. One's first associations must have been ill chosen if fidelity to their essence and foundations comes to be over-clouded by the falling mists of afternoon.

ENGLISH.

Sixth Honours Paper.

Examiner—Praphullachandra Ghosh, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

A. Philology.

Answer any three *of the following questions.*

The questions are of equal numerical value.

1. Classify the Aryan languages, showing their relations to one another, and especially the position and connexions of English in the Aryan family.

2. Distinguish the different forms of writing that have been practised, and sketch briefly the origin of alphabetic writing, and the history of alphabetic writing among English-speaking people.

3. Distinguish with approximate dates what you consider to be the principal periods or stages in the history of the English language, stating the chief distinguishing peculiarities of each period.

4. The Latin element in the English language: explain how and when it was introduced, and discuss the question whether and how its introduction has been beneficial to the language.

5. Write notes on any *five* of the following words and phrases :—riches ; island ; enormous ; reliable ; they, their, and them ; it is him ; ' would he *were* fatter ' ; better than me ; wo worth they day ; ' heat *me* these irons red hot.'

6. Exhibit the different applications of the formative *-ing* with their meanings. Give also the meanings, with examples, of *-dom*, *-hood*, and *-ship*.

7. Sketch the history and uses of *shall, will,* and *may*, and explain the precise meanings of these words in the following sentence : He that *will* not when he *may*, he *shall* not when he *would*.

B. History of Literature.

Answer any THREE *of the following questions.*

The questions are of equal numerical value.

8. Explain the nature of Alliterative verse. At what period was is used ? Mention three important poems in this form. When was Rhyme adopted ? Mention three of the earliest rhyming poets. When was blank verse introduced ? and for what kinds of poetical composition has it been adopted ? Mention two of the longest poems in blank verse.

9. Give an account of the life of Spenser, and of the subject, versification, plan, and style of his principal work. Mention some poems written in imitation of Spenser, with authors and approximate dates.

10. Give an account of the principal works of any *five* of the following authors, indicating their importance in the history of literature :—Geoffrey of Monmouth ; William Langland ; Thomas Malory ; Thomas Sackville ; Christopher Marlowe ; Francis Bacon ; and Thomas Browne.

11. Give an account of any *five* of the following works, sketching subject-matter and style, and stating author and period, and, in the case of poems, their versification :—*Areopagitica ; Hudibras ; A Tale of a Tub ; The Castle of Indolence ; Biographia Literaria ; Imaginary Conversations ; Westward Ho ; Past and Present ; The Stones of Venice ; Bothwell.*

12. Explain the meanings and the ordinary metrical structure of ' Pastoral,' ' Elegy,' ' Ode,' ' Sonnet' and ' Ballad.' Mention the principal writers of each kind, and some noted examples of each.

13. Name and characterize *three* great novelists of the nineteenth century, and give as full an account as you can of any *one* novel by each of them.

14. The ' Augustan' or ' Classical' school of the eighteenth century and the Romantic School of the early nineteenth century : give their distinguishing characteristics ; and mention *three* representative writers of each school, and give some account of *one* of the principal works of each.

ENGLISH.

Dr. H. Stephen, M.A., D.D., *Chairman.*

First Pass Paper.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

First Half.

Examiners—
$\begin{cases} \text{Mr. J. W. Holme, M.A.} \\ \text{Babu Paresnath Sen, B.A.} \\ \text{Babu Bijaygopal Mukherjee, M.A.} \\ \text{Babu Srikumar Banerjee, M.A.} \end{cases}$

Answer Questions 1 *and* 2 *and two others.*

1. Summarize the estimate of her husband's character given by   10
Lady Macbeth on reading his letter. How far is the estimate justified by his conduct in the course of the play ?

2. Explain with reference to the context :—   20

  (*a*)   Was the hope drunk
Wherein you dressed yourself ? hath it slept since ?
And wakes it now to look so green and pale
At what it did so freely ? From this time
Such I account thy love.

  (*b*)   If much you note him,
You shall offend him, and extend his passion:
Feed, and regard him not. Are you a man ?

  (*c*)   Bleed, bleed, poor country !
Great tyranny, lay thou thy basis sure,
For goodness dare not check thee ! wear thou thy wrongs,
The title is afeer'd.

  (*d*) Why should a man, whose blood is warm within,
Sit like his grandsire cut in alabaster ?

  (*e*)   It were too gross
To rib her cerecloth in the obscure grave.

  (*f*) There's not the smallest orb which thou behold'st
But in his motion like an angel sings,
Still quiring to the young-eyed cherubins.

3. Give a short account of the sleep-walking scene, mentioning   1⸳
the previous incidents in the play to which Lady Macbeth refers.

Either,

4. How does Bassanio describe the character of Gratiano ? Justify   10
his description from Gratiano's behaviour in the play.

Or,

Give the substance of Portia's descriptions of *any two* of her
suitors, pointing out instances of her wit.

5. Give instances from *The Merchant of Venice* that point to   10
Shakespeare's knowledge of classical literature and tradition.

SECOND HALF.

Examiners— {
RAI LALITMOHAN CHATTERJEE, BAHADUR, M.A.
BABU SATYENDRANATH BHADRA, M.A.
BABU SATISCHANDRA DE, M.A.
BABU NRITYALAL MUKHERJEE, M.A.
}

Answer Questions 1 *and* 6 *and* TWO *others.*

1. Write explanatory notes on the following passages, referring 14
each to its context:—

   (a)   Yet not the more
   Cease I to wander where the Muses haunt
   Clear spring or shady grove, or sunny hill,
   Smit with the love of sacred song.

   (b) In vain, though by their powerful art they bind
   Volatile Hermes, and call up unbound
   In various shapes old Proteus from the sea,
   Drained through a limbee to his native form.

   (c)   Not that fair field
   Of Enna, where Proserpin gathering flowers,
   Herself a fairer flower; by gloomy Dis
   Was gathered.

   (d)   Close the serpent sly,
   Insinuating, wove with Gordian twine
   His braided train, and of his fatal guile
   Gave proof unheeded.   *Either,*

2. Give the substance of Satan's reflections at the first sight of 12
Adam and Eve.   *Or,*

Summarize Satan's speech to Uriel.

3. Discuss Milton's use of similes.   Illustrate your answer by 12
quoting or referring to *three* examples.

4. Express in your own words the thought contained in the follow- 12
ing lines:

   There is a very life in our despair,
   Vitality of poison,—a quick root.
   Which feeds these deadly branches ; for it were
   As nothing did we die, but life will suit
   Itself to Sorrow's most detested fruit,
   Like to the apples on the Dead Sea's shore,
   All ashes to the taste : Did man compute
   Existence by enjoyment, and count o'er
   Such hours 'gainst years of life,—say would he name three-
      score ?

5. Give generally in your own words, but adopting any note- 12
worthy expressions from Byron, *either* his description of the scenes
preceding the Battle of Waterloo, *or* his estimate of the character
of Napoleon.

6. Explain fully the allusions:—   12

   (a) The Suabian sued, and now the Austrian reigns—
      An Emperor tramples where an Emperor knelt.

(b) When Athens' armies fell at Syracuse,
     And fetter'd thousands bore the yoke of war,
     Redemption rose up in the Attic Muse,
     Her voice their only ransom from afar.
(c) Peace to Torquato's injured shade ! 'twas his
     In life and death to be the mark where Wrong
     Aim'd with her poison'd arrows—but to miss.

7. (a) What does Byron say in *Childe Harold* of Dante, Sylla, the   12
Coliseum ?
   (b) What reasons does he give for his early love of Venice ?

ENGLISH.

SECOND PASS PAPER.

*Candidates are required to give their answers in their own words
as fa˜ as practicable.*

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiners— { BABU RAJANIKANTA GUHA, M.A.
               BABU SATISCHANDRA MUKHERJEE, M.A.
               BABU HEMCHANDRA SARKAR, M.A.
               BABU ABINASCHANDRA BOSE, M.A.

Either,

1. Write a short note on the style used by Shakespeare in his   16
Romances.
                        Or,

Describe after Raleigh the character of Shakespeare's women.
What difference do you find between them and Shakespeare's men ?

2. Show the connexion of *any two* of the following observations   16
with Raleigh's argument, and illustrate them by examples :—
   (a) All poetry, all art, observes certain conventions of form.
These poems are sonnets, There is nothing else conventional about
them, except their critics.
   (b) Shakespeare moves in a larger scheme of things, where the
sun rises on the evil and on the good.
   (c) It is not true to say that in the greater tragedies of Shakes-
peare character is destiny.

3. Elucidate *any three* of the following :—   18
   (a) Shakespeare's poetry has been cut into minute indigestible
fragments, and used like wedding-cake, not to eat, but to dream
upon.
   (b) There are many footprints around the cave of this mystery,
none of them pointing in the outward direction.

(c) But for the accident of genius, tragedy in England might have continued as an imitative exercise, practised chiefly by argumentative philosophers.

(d) Falstaff bestrides the play like a Colossus, and the young gallants walk under his huge legs and peep about to find themselves honourable graves.

(e) Othello has lived all his life by faith, not by sight.

(f) He who runs may read, when he who stands and ponders is strangled by the grammatical intricacies.

SECOND HALF.

Examiners—
{
BABU JAYGOPAL BANERJEE, M.A.
BABU BHUSHANCHANDRA DAS. M.A.
BABU SUSILKUMAR DE, M.A.
BABU SUNITIKUMAR CHATTERJEE. M.A.
}

Either,

4. Write a short note on Scott as a master of the picturesque, illustrating it by references to your text.　　13

Or,

Characterize after Scott the merits and defects of the Highlanders and the Lowlanders as soldiers. To what extent did these affect the success of Montrose and Argyle ?

5. Explain *any two* of the following :—　　12

(a) Were it in my option, I could no more consent to the halving of that dollar, than the woman in the Judgment of Solomon to the disseverment of the child of her bowels.

(b) One of the Campbells replied, ' It is a far cry to Lochow.'

(c) I have sometimes thought of taking a turn either with Bethlem Gabor, or with the Janizaries.

(d) I am just now like the half-pike, or spontoon of Achilles, one end of which could wound, and the other cure.

Either,

6. Discuss and explain Southey's remark, ' Cowper is the best of English letter-writers.'　　13

Or,

What is Keats's conception of the poetic character ? What do you think of Charlotte Brontë as a critic ?

7. Explain *any two* of the following :—　　12

(a) A man will make more by the figures of arithmetic than the figures of rhetoric, unless he can get into the trade wind, and then he may sail over Pactolean sands.

(b) When you have carried your point of discarding the ode, and my point of getting the sack, you will be exactly in the situation of Davy in the farce, who stipulates for more wages, less work, and the key of the ale-cellar.

(c) If there were such darling things as old Chaucer sings, I would *up* behind you on the horse of brass, and frisk off for Prester John's country.

(d) *I* will never *shrink;* and if *you* do, I can always answer you in the question of Guatimozin to his minister—each being on his own coals.

17

ENGLISH.

Third Pass Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

First Half.

Examiners— {
Dr. Jajneswar Ghosh, M.A., Ph.D.
R. C. Goffin, Esq., M.A.
J. S. Zemin, Esq., B.A.
P. C. Ray, Esq.
}

1.   Express in your own words the underlying thought and purpose   25
of the following passage :—

The old Adam within us is the Adam of the pre-social stages of
human history—the impulses of barbarism, the unrectified egotistic emo-
tions of the dweller in cave and wilderness, which will from day to day
burst loose and declare themselves, despite the long discipline to which
mankind has been subjected through centuries of progressing civiliza-
tion.   Every time we give way to such impulses the old barbarian
rises within us, and temporarily reasserts his power.   Scratch the
Russian, and you will find the Tartar just beneath—so runs the pro-
verb ; and in the great mass of men the morality of civilization is as
yet hardly more than skin deep.   As with the ship in Ibsen's grim and
terrible poem, our modern society carries with it a corpse in the car-
go—unbridled elemental passions, the brute instincts, the fierce anti-
social tendencies transmitted to us by our far-off ancestors from the
days before society and even humanity began.

What new significance is in this way given to the oftrepeated phrase
which describes the criminal classes as the failures of civilization !
They are the representatives of the savage left over in the midst of our
more developed life, guided by the savage's predatory instincts, living
in a state of natural enmity with those about them, preying upon their
fellows, to whom they offer nothing in return, and thus remaining un-
integrated into the great organization of mutual-dependent parts which
constitutes society.   The moral progress of man, as John Fiske epi-
grammatically put it, is the gradual process of 'throwing off the brute
inheritance.'   The law of morality thus becomes more emphatically
than ever the law of the higher life ; sin is degeneration, atavism, re-
version to the pre-social or animal type; and the ethical ideal of evo-
lution, in Tennyson's language, is to—

Move upward, working out the beast,
And let the ape and tiger die.

2.   Write in plain prose the story of the destruction of Sennacherib   25
on the basis of the following poem:—

The Assyrian came down like the wolf on the fold,
And his cohorts were gleaming in purple and gold,

And the sheen of their spears was like stars on the sea,
When the blue wave rolls nightly on deep Galilee.

Like the leaves of the forest when summer is green,
That host with their banners at sunset were seen;
Like the leaves of the forest when autumn hath blown,
That host on the morrow lay wither'd and strown.

For the Angel of death spread his wings on the blast,
And breathed in the face of the foe as he pass'd;
And the eyes of the sleepers wax'd deadly and chill,
And their hearts but once heaved, and for ever grew still.

And there lay the steed with his nostril all wide,
But through it there roll'd not the breath of his pride:
And the foam of his gasping lay white on the turf,
And cold as the spray of the rock-beating surf.

And there lay the rider, distorted and pale,
With the dew on his brow, and the rust on his mail;
And the tents were all silent, the banners alone,
The lances unlifted, the trumpet unblown.

And the widows of Ashur are loud in their wail,
And the idols are broke in the temple of Baal,
And the might of the Gentile, unsmote by the sword,
Hath melted like snow in the glance of the Lord.

SECOND HALF.

Examiners— {
A. C. UNDERWOOD, ESQ.
A. CAMERON, ESQ.
J. DRAKE, ESQ.
K. L. NAG, ESQ.
}

Write an Essay on *one* of the following subjects :— 50

(*a*) The proper place and limits of Patriotism.
(*b*) The chief contributions of Great Britain to Indian progress.
(*c*) The dominant needs of modern India.
(*d*) The value of Philosophy as a means of mental culture.
(*e*) The virtue of open-mindedness.
(*f*) The character and significance of recent developments in Bengali literature.

BENGALI COMPOSITION.

Paper-setters— { HON. JUSTICE SIR ASUTOSH MUKHERJEE,.
KT., C.S.I., M.A., D.L.
RAI SAHEB DINESCHANDRA SEN, B.A.
BABU AKSHAYCHANDRA SARKAR, B.L.

Head-Examiner—MAHAMAHOPADHYAYA HARAPRASAD SASTRI,.
M.A., C.I.E.

Examiners— { RAI SAHEB ISHANCHANDRA GHOSH, M.A..
BABU JOGINDRANATH BOSE, B.A.
BABU HARENDRALAL RAY, B.L.
BABU PURNACHANDRA DE, B:A.
BABU GOBINDANATH GUHA, M.A.
PRABHATKUMAR MUKHERJEE, ESQ., B.A., Bar.-
-at-Law.
BABU SASADHAR RAY, M.A., B.L.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate *any one* of the following passages into Bengali:—   20
    (*a*) I thank you warmly on behalf of the Queen-Empress and
myself for the assurance of loyalty and devotion on the part of the
Corporation and citizens of the City of Calcutta to which your
address gives expression.   We are deeply touched by your kindly
reference to my beloved father's stay in your city, and by your
affectionate allusion to our own visit here six years ago.   We can
never forget the cordial welcome given to us on that occasion. It is a
source of great pleasure for us to revisit Calcutta, and to see for our-
selves evidence of your progress and prosperity.
    (*b*) I know that you cherish ambitions that India will one day
become a great manufacturing as well as agricultural country.   I
have watched with keen interest the progress of your business enter-
prises, and I trust that the success which has attended your commer-
cial energy will attract more and more the youth of this country to
regard commerce as a distinguished and honourable profession.   It
shall ever be our earnest endeavour to promote the welfare of our
Indian Empire, and we fervently hope that the years as they pass
will ever strengthen the feeling of warm attachment that exists be-
tween my house and my Indian people.
    2. Give the gist of the two chapters of *Sri Kantha* headed চিত্রদর্শন   6
and বিসর্জ্জন ।
    3. Reproduce in your own words that episode from the *Kapala-*   9
kundala which has appeared most interesting to you.
    4. Give a sketch of Vidyasagar as he was in his family, with   9
special reference to his conduct towards his parents.
    5. Which of the two characters, Mati Bibi and Kapalakundala,   9
as depicted by Bankim Chandra, do you like most? Give your

6. Rewrite the following in chaste and elegant Bengali :— 10

সেই মাতাপিতা, যাঁহারা হচ্ছেন তোমার গুরুজন, পালন করে-
ছিলেন যাঁরা তোমাকে কত কষ্ট স্বীকার করিয়া, নিরবধি কচ্ছেন
যাঁহারা তোমার ইষ্ট সাধনা, যাঁহাদের ছাড়া তোমার গতি ছিল না
এক কালে, তুমি যখন হাঁটিতে পারিতে না তোমায় তখন কোলে
করিয়া বেড়াইতেন যাঁহারা, সেই মাতাপিতার প্রতি তোমার এই রূঢ়
ব্যবহার কি সঙ্গত ?

7. Correct all errors in the following extract :— 10

আমার অবকাশ না থাকাতে আমি তাহার কাতর সংবাদ
শুনিয়াও দেখিয়া যাইতে পারি নাই, এজন্য সে অসন্তোষ হইয়াছে,
ইহা আমার দুরদৃষ্ট। তাহার চিত্তমুকুরে যে সন্দেহের বীজ উপ্ত
হইয়াছে তাহা ভবিষ্যতে তাহার সকল সুখ গ্রাস করিবে। এই শয্য
শ্যামলা ভারতবর্ষে জন্ম গ্রহণ করিয়াও কত ব্যক্তি দুর্ভিক্ষরূপ সমুদ্রের
গ্রাসে পড়িয়া দগ্ধ হইতেছে।

Either,

8. Write a folk-tale that you may have heard. 24

Or,

An essay on any of the following subjects :— 24
  (a) The profession you intend to follow on entering life.
  (b) Moral courage.
  (c) An Indian religious reformer.

HINDI COMPOSITION.

Paper-setters— { BABU PURANCHAND NAHAR.
LALA SITARAM, B.A.

*Examiner—*LALA SITARAM, B.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into Hindi :— 40
  (a) There is, perhaps, some danger that the popular awakening
which has taken place in recent times to the importance of educa-
tional questions may lead to the injudicious application of educa-
tional processes. In the keen struggle for existence that goes on in
these days it has become apparent that individuals and states will
prove prosperous in proportion as they are instructed, and so we
have passed from *laissez faire* to compulsion, and the boon of education

has been conferred on our lower 'and ignorant masses. But the education of the masses, in the thorough and liberal spirit in which it is now conducted, entails upon the middle classes the necessity of a higher and better training than they have been heretofore accustomed to, if they would maintain their position; and the advance of the middle classes in sound learning imposes on the upper classes the duty of the highest possible cultivation, if they would still lead and rule. There is a general upheaval, therefore, in educational matters—a straining forward, which may end in misfortune if reasonable restraints be not imposed, for it is very certain that immense numbers of the children now taught in schools, and pushed on with a zeal that is assiduously stimulated in every possible way, are ill prepared for mental exertion or brain work. Some are constitutionally delicate, some are imperfectly developed, some are badly nourished, and many lack the inherited aptitude for study which deprives it in a great measure of its irksomeness and galling qualities.

(*b*) Evils have grown in civilized communities in the nineteenth century, notwithstanding all the progress we have made in art and science and the rational reform of our personal and social life. Civilization has gained infinitely in value by the change we have made in our conceptions of time and space in this age of steam and electricity. We can make our domestic and public life much pleasanter, and avail ourselves of a far greater number of luxuries than was possible to our grandfathers a hundred years ago. But all this has caused a much greater expenditure of nerve energy. The brain has to bear a much greater strain, and is worn out earlier, the body is more stimulated and overworked than it was a hundred years ago. Many diseases of modern civilization are making appalling progress: the various diseases of the nerves carry off more victims every year. Our asylums grow bigger and more numerous every year, and we have sanatoria on every side in which the baited victim of modern civilization seeks refuge from his evils. Some of these evils are quite incurable, and the sufferers have to meet a certain death in terrible pain. Many of these poor creatures look forward to their redemption from evil and the end of their miserable lives. The important question arises whether, as compassionate men, we should be justified in carrying out their wish and ending their sufferings by a painless death.

(*c*) It is most right that in the great republic of letters there should be freedom of intercourse and a spirit of equality. Every reader who holds a book in his hand is free of the inmost minds of men past and present; their lives both within and without the pale of their uttered thoughts are unveiled to him; he needs no introduction to the greatest; he stands on no ceremony with them; he may, if he be so minded, scribble ' doggrel' on his Shelley, or he may kick Lord Byron, if he please, into a corner. He hears Burke perorate, and Johnson dogmatize, and Scott tell his border tales, and Wordsworth muse on the hillside without the leave of any man, or the payment of any toll. In the republic of men there are no privileged orders or places reserved. Every man who has written a book, even the diligent Mr. Whitaker, is in one sense an author : ' a book's a book although there is nothing in it'; and every man who can decipher a penny journal is in one sense a reader. And your ' general reader,' like the gravedigger in Hamlet, is a hail-fellow with all the mighty dead; he pats the skull of the jester ; batters the cheek of lord, lady, or courtier ; and uses ' imperious Caesar' to teach boys Latin declensions.

2. Write an essay in Hindi on *one* of the following subjects :—   40

(a) A great poem is in fact an image of national feeling—the Ramayana of Tulsidas.

(b) Study of poetry—what constitutes good poetry—the chief end of poetry—pleasure—instruction.

(c) Is compulsory free education possible or desirable in India under the present circumstances ?

(d) The character of Rama—the model son, brother, husband, and king, the Arthur of Indian chivalry.

3. Rewrite the following, filling up the ellipses :—   20

हमारे कार्यों – परिणाम – दूर – पहुँचता है । इस – जो –
हम करें उसे – विचार कर करें । हमारे – हम – तक – जाते तो
इतनी – होने – सम्भावना न थी । – हमारी कार्यावली – सारी
समाज – पड़ता है । इस लिये हमारा उत्तर – बहुत – है ।
– हम कोई प्रशान्ति – काम – बैठते है – समस्त – में प्रशान्ति
को – पैदा हो जाते हैं । अत – हमें सुख इस – में संलग्न –
चाहिये कि हमारे – कार्य से किसी प्राणमात्र भी – न दुखे ॥

ORIYA COMPOSITION.

Paper-setters— { HON. MR. MADHUSUDAN DAS, C.I.E., M.A., B.L.
BABU MADHUSUDAN DAS. M.A.

Examiner—BABU MADHUSUDAN DAS. B.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into Oriya :—

(a) With all their enormous differences in natural endowment,   15 men agree in one thing, and that is their innate desire to enjoy the pleasures and escape the pains· of life; and, in short, to do nothing but that which it pleases them to do, without the least reference to the welfare of the society into which they are born. That is their inheritance (the reality at the bottom of their original sin) from the long series of ancestors, human, semi-human, and brutal, in whom the strength of this innate tendency to self-assertion was the condition of victory in the struggle for existence.

(b) The tumults are great in all parts of England on account of   15 the excessive price of corn and bread, which has risen since the harvest. I attribute it more to the abundant increase of paper, and the non-circulation of cash, than to any other cause. People in trade can push the paper off as fast as they receive it, as they did by con

tinental money in America ; but as farmers have not this opportunity
they endeavour to secure themselves by going considerably in advance.
Now I have given you all the great articles of intelligence, for I
trouble not myself with little ones.

(c) I fully admit that the mischief which a person does to him-   15
self may seriously affect, both through their sympathies and their
interests, those nearly connected with him, and, in a minor degree,
society at large. When, by conduct of this sort, a person is led to
violate a distinct assignable obligation to any other person or persons,
the case is taken out of the self-regarding class, and becomes amen-
able to moral disapprobation in the proper sense of the term. When-
ever a person disables himself by conduct purely self-regarding he is
guilty of a social offence, if he fail thereby to perform a duty incum-
bent on him to the public.

(d) The isolation of the Khasi race, in the midst of a great en-   15
circling population, all of whom belong to the Thibeto-Burman stock,
and the remarkable features presented by their language and institu-
tions, soon attracted the attention of the comparative philologists
and ethnologists. An account of their researches will be found in
Dr. Grierson's *Linguistic Survey of India.* Here it will be sufficient
to mention the important work of Mrs. Logan who demonstrated the
relationship which exists between the Khasis and certain peoples of
farther India ; the chief representatives of whom are the Mōns of
Pegu and the majority of the inhabitants of Annam. But, however,
the exact nature of the relations between them is as yet one of the
unsolved problems of ethnology.

2. Write an essay on *any one* of the subjects named below :—   40
    (a) Miracles and natural law.
    (b) The value of life.
    (c) Liberty of thought and action.
    (d) Temple building and sculpture in ancient Orissa.
    (e) Doing good to others is indirectly doing good to one's own
        self.

3. (a) Explain fully in idiomatic Oriya the following extract :—   10

ଯୂଢ ବୈତରଣୀସ୍ତେ।ତ୍ରଭୁକ ଗୋ।ନ।ସ।
ରୃଷି ସଂଘ ମଟେଆ ଯହୁଁ ଭାର୍ଗବ ମୁଖରୁ
ଯ଼େର ଯୂଢତର ଯୁଣ୍ୟସେ।କକଥାମୃତ

(b) Expound and explain the *samāsas* in the words underlined.   10

Correct all kinds of errors in the following passage :—   10

ଏବେକୁ ଓପରୁ ଭୟ ତମ୍ୀ ଅସିଚ୍। ଅଟେ ସା଼ୀ।କମାନେ
ନ।ଅଁ।ରୁ ଗସ୍ତ କରୁବାକୁ ଅସି ଯୋତ୍ରା ଟେ।ପଠିଯ ଵୃଲ ଯାଉ ଥିଲେ
ଏବେ ହୋ।କ୍ରମ ଅସିତ ଯେ ସେମାନେ ଗାଁଵଁ ଗାଁଵଁ କୁଲ ଲେକଙ
ସଟେ ମିଲ ମିସ। କର ଧାଙ୍କମାନଙ୍କର ହ୍ଯାଲ୍ତଲଣ ସମସ୍ତ ଦେଶୀ
ଯେଯର ସେମାନେ ଶ୍ୱୁରେ ରହ୍ଵବ ତହ୍ଁିର ବେବସ୍ଥ। କରବେ ।

କ ଗଣ୍ଡ, କ ଡାଲେକର, କ ପିଲ୍ଲ, କ ବୁଢ଼ା ସଭ୍ୟକ ସାଙ୍ଗେ
ସମାନଭ୍ୟବରେ ମିଶି କଥାବାର୍ତ୍ତା। କର ଘରକରଣାଠାରୁ ବେପାର-
ବାଣିଜ ଯାଏ ସବୁ ଭୁଲ୍ଠ କରିବେ ।

URDU COMPOSITION.

Paper-setters— { Dr. M. M. Hukk, Ph.D.
{ Maulavi Md. Mustapha Khan, M.A., B.L.

*Examiner—*Dr. M. M. Hukk, Ph.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

●

The figures in the margin indicate full marks.

1. Translate into Urdu *any two* of the following passages:—   20
    (*a*) Carlyle was in perpetual opposition to the main tendencies of
his own age. He preached the benefits of benevolent despotism to a
generation whose main political work was the development of demo-
cratic principles; and to an age of easy optimism, bred of unparalleled
commercial activity, he proclaimed the doctrine that wealth is not
prosperity, and only brings new dangers instead of removing the
old. This perpetual opposition, which made him such a healthy
stimulus to his first readers, however, is apt to militate against him
with their successors. The defects of his method—his habitual
exaggeration and the great preponderance of destructive criticism in
his works—rather repel readers of to-day. But his outstanding prin-
ciples, his doctrine of the sacredness of work and the sacredness of
truth, have already passed into the current thought of our time.
As a literary artist, as a painter of individuals and individual scenes
in biography and history, he is unrivalled among the prose writers of
the world. The style of his earliest works is little different from that
of ordinary compositions of the preceding generation; but as his
genius developed he forged for himself a new style, unfettered by
any of the ordinary conventions, and for the most part, running
counter to them.
    (*b*) The classical period of Arabic literature is pre-Islamic, and   20
consists throughout of poems which lived in the mouths of the people.
Beginning with short ditties and epigrams of impromptu character,
it soon developed more artistic forms, and one hundred years before
Muhammad the Prophet we encounter a fine array of stately metres.
These poems are called *Kasidahs,* each line consisting of two half-
verses, with the rhyme repeated in the second half of each. Al-
though the productions of this period were in later centuries col-
lected, annotated, and edited by men who loved their native tongue,
the texts of many of the poems, as handed down to us, are anything
but in a sound condition. The same men also discoursed on the
lives of the poets, and arranged their works in groups according to
their pre-eminence. One of these are the seven famous *Moallakat*

('the suspended ones'), a name which gave rise to the legend that these poems having won the prize, were woven in gold brocade and suspended in or on the Kaaba. The first prose composition is the Kuran, and it marks the most important epoch in Arabic literature. The mere necessity of understanding the Kuran awakened linguistic studies, which were subsequently taken up for their own sake, and resulted in compendia of grammar astounding in their hair-splitting elaboration. Dictionaries were compiled, which in our time are indispensable to the foreign student of Arabic. There is hardly any branch of human thought to which the Arabs did not devote their pens.

(c) Cavalry is essentially an arm of offence, and its distinctive   20 characteristic is the action of man and horse combined. This enables it to cover long distances in short periods of time, and to combine attack with surprise to the best advantage. The fact that it is now armed with a long-range rifle has yet further increased its power of resistance and extended its sphere of action. These qualities are particularly desirable in a period when the great bulk of a modern army renders it almost impossible to extricate it from a deployment to which it has been once committed. They enable the cavalry to be pushed far further to the front than has been the custom in recent years, and, in short, to revert to the practice by which Napoleon won so many of his victories. His cavalry, it will be remembered, was often more than 100 miles in front of his army, and was able not only to discover the dispositions of the enemy but to enable its own main body to complete its deployment in concealment and security. These are the main duties of the cavalry to-day, and it is therefore distributed in the *Strategical*, *Protective* and *Divisional Cavalry*.

2. Elucidate in simple Urdu *any three* of the following lines: 9

(a) جہـــــانکتـــے تھے وہ مجھے جس روزن دیوار سے
واسے قسمت ہو اسی روزن میں گہر زنبور کا

(b) کیا پوچھتـــا ہے تو عمـــل بغض و محبت
چلتـــا ہوا تعویذ، سمجھـــہ نقش دم کو

(c) رخصت اے زنداں جنوں زنجیر در کہرکاــے ہے
مژدہ خار دشت پھر تلوا مرا کہجلاـے ہے

(d) ذکر بتاں سے پہلی سی نفـــرت نہیں رہی
کچھـــہ اب تو کفـــر مومن دیں دار کم ہوا

(e) کہتے ہو نہ دینگـــے دل اگـــر پـــڑا پایا
دل کہـــاں کہ گم کیجے ہم نے مدعا پایا

3. Write sentences introducing *any four* of the following :—

هٿ دهرمی - ادهیز بن - گرو گهنٿال - موٿی مٿی

چکنی چیٿری - بهرمار - بهول بهلیاں *

4. Explain the terms ریخته and اردو.   3

5. Write an essay in Urdu on *any one* of the following subjects :—   40
   (*a*) Abuz-*Zafar* Muhammad Bahadur Shah as (i) poet, (ii) patron of poets.
   (*b*) The charms of the spring season.
   (*c*) Distinguishing features with quotations of the *rekhta* composi-tions of (i) Zauk and (ii) Ghalib, referring to the friendly rivalry of the two men.
   (*d*) The choice of a profession.

ASSAMESE COMPOSITION.

Paper-setters— { SRIJUT HEMCHANDRA GOSWAMI, B.A.
{ SRIJUT PADMANATH BARUYA, B.A.

Examiner—BABU NABINCHANDRA BARDOLAI, B.L.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into Assamese *any two* of the following passages :—   40
   (*a*) Now was the middle of night, when over half the world nature seems dead, and wicked dreams abuse men's minds asleep, and none but the wolf and the murderer is abroad. This was the time when Lady Macbeth waked to plot the murder of the King. She would not have undertaken a deed so abhorrent to her sex, but that she feared her husband's nature, that it was too full of the milk of human kindness to do a contrived murder. She knew him to be ambitious, but withal to be scrupulous, and not yet prepared for that height of crime which commonly in the end accompanies inor-dinate ambition. She had won him to consent to the murder, but she doubted his resolution; and she feared that the natural tender-ness of his disposition (more humane than her own) would come be-tween and defeat the purpose.
   (*b*) Boys of molten gold stood each on a polished altar, and held torches in their hands, to give light all night to the guests. And round the house sat fifty maid-servants, some grinding the meal in the mill, some turning the spindle, some weaving at the loom, while their hands twinkled as they passed the shuttle, like quivering aspen leaves. And outside before the palace a great garden was walled round, filled full of stately fruit trees, gray olives and sweet figs and pomegranates, pears and apples, which bore the whole year round. For the rich south-west wind fed them, till pear grew ripe pear, fig on fig, and grape on grape, all the winter and the spring.

(c) Here were a hundred rose-bushes, there many acres covered with the delicious jessamine, while yonder were extensive plantations of all sorts of flowers. As all the plants were begemmed with flowers and as the flowers were in full bloom, the air was loaded with rich perfume. It was a wilderness of sweets. Through this paradise of perfumery they proceeded towards the house, which was surrounded by banks of lofty trees. They stood at the door of the house. It was a fairy palace. The walls were of burnished gold, and here and there shone diamonds of dazzling hue which were stuck into the walls. They went inside, which was richly furnished. They went from room to room, but they did not see any one.

Either,

2. (a) Render the following into simple and chaste modern forms :—   10

কালিন্দী জলত কালীৰ সৰ্পৰ মহা হ্ৰদ আছিল। যাৰ জল বিষাগ্নিৰে উতলি থাকে উপৰে যাইতেও পক্ষি সব পড়ে। তাৰ বাষ্প নাগিত তীৱৰ হ্বাবৰ জন্তম মৰে। হেন চণ্ডবেগ বিষবীৰ্য্য কালীৰ দূষিত নদী দেখি তাৰ নিগ্ৰহাৰ্থে কটিত বস্ত্ৰ বান্ধি কদম্বত চৰি বাহু তালি মাৰি হ্ৰদত পৰিলা। ভগৱন্তৰ পতন বেগে হ্ৰদৰ জল উথলি উঠি চৌদিকি চচাৰিশ হাতড় বাইলা। আক অনন্তবল ভগৱন্তৰ চিত্ৰ নেদেখিবা। পাচে বাহক আফালি হ্ৰদত বিহাৰ কৰিতে জলৰ শব্দ শুনি আপুন গৃহৰ পৰা ভয় দেখি তাক নসহি সৰ্প খেদি আসিল। শ্যাম সুন্দৰ পীত বসন শ্ৰীৱৎসলাঞ্ছন হাস্যে সুন্দৰ মুখ পদ্ম সম চৰণ দেখি ক্ৰোধে মৰ্ম স্থানত দংশি দেহে সৰ্ব শৰীৰ ঘেৰিল। ভগৱন্তো সৰ্প দেহে আবৃত হয়া, মনুষ্য চেষ্টা দেখায়া নিচেই ৰহিলা।

Or,

(b) Explain the following passages with reference to their contexts :—

   (i) যি বলীয়ে ৰাজ্য দখল কৰে, তেওঁ প্ৰশংসনীয় নহয়, কিন্তু যি নিজৰ মনক দখল কৰিব পাৰে, তেওঁৱেই হে প্ৰশংসাৰ যোগ্য।

   (ii) যিবিলাকে সকতে শিক্ষা নেপাইছিল আৰু মনৰ প্ৰবল গতিত কোনো বন্ধুৰ বাধা নেপাইছিল, প্ৰায় তেনেকুৱা মানুহহে ফাটেকত আছিল।

   (iii) সংসাৰৰ লহৰি, সংসাৰৰ স্ৰোত সংসাৰৰ গ্ৰাহ কুম্ভীৰ আদি বৈৰীকূল সকলোৰে মুখা পিন্ধি মোহিনীৰূপ ধৰি থাকে। তাত শত্ৰুৰে মিত্ৰৰ ভাও দিয়ে, শক্টে স্বচলৰ ভাও দিয়ে, বিপদে সম্পদৰ ভাও দিয়ে।

Either,

3. (a) Can you justify the attack of Matali on the Bidushaka in the *Sakuntala* ? Give your answer in Assamese.   5

Or,

(b) Discuss the propriety of Kaṇva's advice to Sakuntala on the eve of her departure to her husband's house.

Either,

4. (a) Frame short sentences with *nouns* derived from দূৰ, হেঙ্গৌৰী,   5 কুৱা, and with *adjectives* derived from মোৰ, চৰৱ, পানী।

Or,

(b) Form simple sentences to illustrate the meanings of the words পাইক, পহনজি, পৱলা, পৱচেটা, গাজিবাক্ ।

Either,

5. (a) Narrate an Assamese folk-tale that you know in simple prose   40 in Assamese.

Or,

(b) Write an essay in Assamese on *any one* of the following subjects:—(i) Truthfulness; (ii) Mass Education; (iii) Knowledge is power; (iv) Pleasures of life.

BURMESE COMPOSITION.

Paper-setters— { MAUNG WE LIN, ESQ.
 MAUNG TIN, ESQ., M.A.

Examiner—MAUNG BA, ESQ., B.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate any *two* of the following:—

(a) Bird life, by reason of its predominating insect diet, is the most   20 indispensable balancing force in nature. No one can tell what far-reaching results might follow the extermination of a single species of bird, for it is probable that the food preference of each species is so distinctive that no other could exactly fill its place. But for the trees the insects would perish, and but for the birds the trees would perish. A great increase of insects, and enormous damage by them, invariably follows wholesale destruction of wild bird life. In New Zealand, owing to the slaughter of birds, one has seen countless billions of caterpillars move in a solid mass across cultivated land, devouring every green thing in their march. Even railway trains were stopped by the immensity of the number of these crawling atoms.

(b) Are we really in an age of advanced civilization? Are we   20 better off than our fathers? In so far as our material prosperity is concerned, we may be said to be advanced. But are we not deteriorating in other respects? Are we grown wiser and stronger? Are we really improved physically, intellectually, and morally? Perhaps we do not see this. Truly, we cannot see this now. But let us wait a few more minutes and have another breathing space, for the accusations levelled at us have taken us aback like a sudden thunder bolt. Now to proceed. Are we as bold as our fathers, who stood, barefooted, face to face with their enemies? Have we not recourse to stratagems and cunning in order to overthrow our enemies? Why then our torpedoes and other secret instruments of war? Are we

really grown wiser and morally superior ?   How then these wars where
innocent women and children are butchered for no fault of theirs ?
Are our wars a necessary evil ?   Do they not spring from mere
avarice and blood-thirst ?   Are we physically stronger ? Can we
undertake to accomplish the deeds which our fathers did in the twink-
ling of an eye ?

(c) The Princess became to the poor villagers the incarnation of   20
power on earth.   She would have been thought rich in any country ;
to their utter wretchedness her wealth was fabulous beyond the
bounds of fairy tale.   Most persons would have admitted that she
was wonderfully practical and showed a great deal of common sense
in what she did.   She was endlessly charitable to women and children
and old men, but to those who could work she was inexorable.   She
paid well, but she insisted that the work should be done honestly.
Some of the younger ones murmured at her hardness when they had
tried to deceive her.   ' Would you take false money from me ' ?
She asked.   ' Why should I take false work from you ?   You have
good work to sell, and I have good money to give you for it.   I do
not cheat you.   Do not try to cheat me !'   They laughed shame-
facedly, and worked better the next time, for they were not without
common sense either.

2.   Turn into plain Burmese prose—   20

တကၥနှင့်ဆရၥ၊ ရှၥနှင့်ရပ်သၥး၊ သၥးနှင့်အဘၥ ဖြစ်
ကြသည်တကြၠာင်း၊ သၢဘၢၡပြၠင်း၍၊ ကၠၢင်းရၥကို
ယွၩ်၊ မကၠၢင်းရၥကိုကြည့်စိမ့်မည်၊ အစၪ်ၥ၅ှၠးဦး၊ ပက
ဘူးကၥ၊ သွင်းဘူးသည့်ၦလုံးဖြင့်၊ အဆုံးအဖြတ်၊ တရၥး
နှင့်ၥ၉စ၀ၥသၥ်၊ စိတ်မတၠတ်၍ကိုယ်ကြၠသည်၊ မိတ်မၡ
ပ်၍ၡိုၥလၡသည်၊ ရည်ဆၠၠ၎င်ချက်စကၥး၊ သူဟၠင်း
တို့ထၥးသည့်နှင့်၊ အလၥးဘူမၡၥၠအၠၠင်၊ သတိကိုဆၠၥ
က်တည့်မူ၊ ပြုစွၥသၢဘၢ၊ သတ္တၢအၥးၥၡပြၢသဖြင့်။ ၡၥၠၡို
သည့်ကုသိုလ်ကို၊ မရှုလိုအၠၥသၥနှင့်၊ နင်လၥၠ၁ဆၠၥ်းအၠၠၥးၥ၊
ၥ၀ၠးကိုသတ်မည်၊ လၠက်ၥၡၠ၎င်း အၥရည်သို့၊ မကြည်
ၥအၥၠင်ကၠနှၠ့်ကွက်၊ အလၠ့ဘၠက်ကို၊ အမျက်မၦၲၪ်ၥ၀ၠရၥ။

3.—Write an essay on *one* of the following subjects :—   40

     (a) Superstitions and their effect on social life.

     (b) Public opinion—the various stages of its development—in-
fluence of leaders and its stability—proper use of leaders' influence
and the disastrous consequences of its abuse.

     (c) The evils of early marriage.

ENGLISH.

ALTERNATIVE PAPER.

Paper-setters—{ BABU HERAMBACHANDRA MAITRA, M.A.
J. W. HOLME, ESQ., M.A.

Examiner—BABU HERAMBACHANDRA MAITRA, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Answer TWO *questions only.*

1. 'Every nation's vice, or virtue, was written in its art.' Express in your own words Ruskin's adaptation of this saying to modern conditions. 25

2. Describe briefly the three kinds of noble war, as conceived by Ruskin. 25

3. 'You may make of England itself the centre of the learning of the arts, of the courtesies and felicities of the world.' How, according to Ruskin, is all this to be accomplished ? 25

SECOND HALF.

4. 'For the poet the Ideal World is not remote from the Actual, but under it and within it: nay, he is a poet, precisely because he can discern it there.' Elucidate the observation, and apply it to Burns. 12

5. 'We do not think that the blame of Burns's failure lies chiefly with the world.' Justify this view. 13

6. 'It was a hard trial. Scott met it proudly, bravely,—like a brave proud man of the world. Perhaps there had been a prouder way still.' Explain fully. 10

7. 'Among the great of all ages, one sees no likelihood of a place for Scott.' Discuss the verdict. 15

SANSKRIT.

Paper-setters—
{ HON. SIR ASUTOSH MUKHERJEE, KT., C.S.I.,
  M.A., D,L.
  RAI RAJENDRACHANDRA SASTRI, BAHADUR,
  M.A.
  MAHAMAHOPADHYAYA DR. SATISCHANDRA
  VIDYABHUSHAN, M.A., PH.D.
  BABU BRAJALAL CHAKRAVARTI, M.A., B.L.
  BABU SURENDRANATH MAJUMDAR, M.A.

FIRST HONOURS PAPER.

Examiner—MAHAMAHOPADHYAYA DR. SATISCHANDRA VIDYA
BHUSHAN, M.A., PH.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Give an outline of the duties of a pupil (शिष्य) towards his pre-   8
ceptor (गुरु) as laid down in the Manusamhitā.

2. (*a*) Explain *three* of the following terms :—   6

ब्राह्मं तीर्थम्, ब्रह्माञ्जलिः, ऋत्विक्, ब्राचार्य्यः, and उपाध्यायः ।

(*b*) Give the substance of the following in Sanskrit :—   6

पञ्चानां त्रिषु वर्णेषु भूयांसि गुणवन्ति च ।
यत्र स्युः सोऽत्र मानार्हः शूद्रोऽपि दशमीं गतः ॥

3. Translate *any two* of the following verses into English :—   8

(*a*) उद्वद्द्यात्मनश्चैव मनः संसदात्मकम् ।
मनसश्चाप्यहङ्कारमभिमन्तारमीश्वरम् ॥

(*b*) वेदोऽखिलो धर्ममूलं स्मृतिशीले च तद्विदाम् ।
ब्राचारश्चैव साधूनामात्मनस्तुष्टिरेव च ॥

(*c*) विधियज्ञाज्जपयज्ञो विशिष्टो दशभिर्गुणैः ।
उपांशुः स्याच्छतगुणः साहस्रो मानसः स्मृतः ॥

4. Translate the following into English :—   7

यस्मात् पूजितमस्मान् सामर्थ्यं वीर्य्यञ्च रक्षति, प्रपूजितं पुनरेतदु-
भयं नाशयति, तस्मात् सर्वेश्व ब्रह्मं पूजयेदिति पूर्वशैकवानूतापन्नमिदं

फलप्रवर्षं सम्भावस्यनागे उपास्तुरितसयवन्धियसु । कामनाविषयल्ले
नापि नित्यव्रतिरविहता । नित्यश्रुतिविरोधात् फलप्रवर्षं स्त्वर्थमिति
तु मेधातिथिगोविन्दराजौ ॥

5. (a) Who were the Kirātas ? Where did they live ?   2
(b) Give a critical estimate of Bhāravi as a poet with illustra-   6
ti ns from the Kirātārjunīyam.

6. (a) Explain the following stanza in Sanskrit in the manner of   6
Mallinātha :—

सखीनिव प्रीतियुजोऽनुजीविनः

समानमानान् सुहृदश्च बन्धुभिः ।

स सन्ततं दर्शयसे गतक्षयः

कृताधिपत्यामिव साधु बन्धुताम् ॥

(b) Give the substance of the following stanza in English :—   4

गुणानुरक्तामनुरक्तसाधनः ।

कुलाभिमानी कुलजां नराधिपः ।

परैस्त्वरन्यः क इहापहारयेन्

मनोरमामात्मवधूमिव प्रियम् ॥

7. Translate *two* of the following stanzas into English :—   10

(a) पुरःसरा ग्रामवतां यशोधनाः

सुदुःसहं प्राप्य निकारमीदृशम् ।

भवादृशाम्बेरधिकुर्व्वते रतिं

निराश्रयाच्चन्तहता मनस्विता ॥

(b) बलवानिव कोपजन्मनः

तमसो नाभिभवं सहन्ति यः ।

सयपस्स इवेन्दवौः कलाः

सकला सन्ति स शक्तिसम्पदः ॥

(c) श्रणार्प्युपहन्ति विग्रहः

प्रभुमन्तः प्रकृतिप्रकोपजः ।

अखिलं हि हिनस्ति भूधरं

तरुशाखान्तंनिघर्षजोऽनलः ॥

In (a) derive यशः, सुदुःसहं, and भवादृशाः. In (b) conjugate the   9
roots of सहति, शक्ति, and सम्पद् in लिट् and लुट् third person all

18

numbers. In (c) expound the *samasas* in **चना:प्रक्रतिप्रकोपज:** and **तद्यरावाग्मविषयंज:** .

8. Elucidate the following in English :— 　　　3

त्रासमाविष्कृतपौरुषैर्मुंजैः—भुजैरिति गम्यमानसाधनक्रियापेक्षया कारखात् तृतीया । उक्जच न्यायोद्गोसे "न केवलं भूयसायैव क्रिया निमित्तं कारकभावखापि तु गम्यमानापि" । इति ॥

9. Translate the following passages into Sanskrit :—

(a) So he wandered from holy place to holy place until he reached　15
Manipur. Now the rajah of that place had a beautiful daughter
whose name was Chitrāngadā. Arjuna loved her, and sought her
for his bride. The rajah said : ' I have no other child, and if I give
her unto thee, her son must remain here to become my heir, for
the god Śiva has decreed that the rajahs of this realm can have each
but one child.' Arjuna married the maiden, and he dwelt for three
years at Manipur. A son was born, and he was named Chitrāngada.
Thereafter Arjuna set out on his wanderings once more.

(b) Truly, as Solomon said, ' A soft answer turneth away wrath.'　10
Boys, be of good temper. There is nothing like humility. ' Kind
words awaken kind echoes.' The world around us is a mirror in which
a man may behold the reflection of himself. ' To love' is ' to be
loved.' If you behave rudely to others, you get rudeness in return ;
civility brings its usual recompense.

SANSKRIT.

Second Honours Paper.

Examiner—Babu Umacharan Banerjee, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. What is the dictum of Indian Dramaturgy as to the ' Unity of　10
time and place' ? Does *Bhavabhūti* observe it in the *Uttaracarita* ?
Give the ' time analysis' of the drama, and indicate the places of
action of the several acts.

2. Compare the character of *Sakuntalā* of Kalidāsa with that of　10
the Mahābhārata. How has Kalidāsa improved it ?

3. (a) Translate into English *two* ślokas, selecting *one* from *each*　8
group:—

Group A.

(i) **तीव्राघातप्रतिहततरः कम्बलप्रेंकरन्तः पाशाकृष्ट्व्रततिवखयासकुमझ्रातपाश: । मूर्त्तिं विघ्नखपस इव न। भिन्नसारङ्गयूणो धर्मारख्यां प्रविशति गजः खन्दनालोकभीत: ॥**

(ii) रयेनानुद्वातखिमितगतिना तीर्थंजलधिः

पुरा षड्वीपां जयति वसुधामप्रतिरथः ।

इहायं सत्त्वानां प्रषभदमनात् सर्वंदमनः

पुनर्यास्यत्याख्यां भरत इति लोकस्य भरणात् ॥

Group B.

(iii) ग्रलसञ्चलिसमुरधान्ध्यषञ्ज्ञातखेदा-

इशिथिलपरिरम्भैर्दत्तसंवाइनानि ।

परिस्तुदितमृणालीदुर्श्बलान्यङ्गकानि

खमुरषि मम कृत्वा यत्र निद्रामवाप्ता ॥

(iv) परिपाण्डुदुर्बलकपोलसुन्दरं

दधती विलोलकबरीकमाननम् ।

कर्णस्य मूर्त्तिरथवा प्ररोरिणी

विरहव्यधेव वनमेति जानकी ॥

(b) Expound the *samāsas* in the underlined word *either* in (i) *or*   2
in (iii) and (iv).

(c) Account for the *ka* in चषकानि (iii), *and* in विलोलकवरीकम्   3
(iv), and for the ष्ट in जयति (ii).

(d) Derive भरणात् (i) and तीर्थं (ii).   2

(e) Give the third person singular forms of the roots of भरणात् (i)   2
in *liṭ* and *luṅ*, and of खेद् (iii) in *luṅ*.

(f) Name the *alaṁkāra* in *śloka* (iv).   1

4. (a) Refer to the context and explain in *ṭīkā* form *one* extract   12
from group A and *one* from group B:—

Group A.

(i) श्रुतं भवद्भिरघरोत्तरम् ।

ग्राजन्मनः ग्राठ्यमविग्चितो य-

स्तस्याग्रमायां वचनं जनस्य ।

परातिसन्धानमधीयते ये-

विंह्रोति ते सन्तु किलाप्तवाचः ॥

(ii) स्वप्नो नु माया नु मतिभ्रमो नु

क्लिष्टं नु लावस्फलमेव पुण्यम् ।

यषन्निवृत्तेन तश्लीतमेसे

मनोरथानामनटप्रपाताः ॥

GROUP B.

(iii) विषुलितमतिपूरेवांयमानन्दश्लोक-

प्रभवमवचजन्ती तृष्णायोत्तामदीर्घां ।

स्वपयति वृक्येश्र केचनिथ्यन्दिनी से

धवणब्हुलमुग्धा बुरघकुक्येव दृष्टिः ॥

(iv) अतिश्यितधुराधुरप्रभावं

त्रिशुमवलोका तवैव तुल्सचपसू ॥

कुश्रिकसुतमखङ्गिषं प्रमाथे

धृतधनुषं रघुनन्दनं करगमि ॥

(b) Derive खम and चिन्झ in (ii), and conjugate their roots in *laṭ*   2
3rd person singular.

(c) Derive वचयति and सुग्ध in (iii); give their alternative forms,   3
and conjugate their roots in the 3rd person singular of *liṭ* and *laṭ* respectively.

(d) Comment grammatically on धृतधनुषम् in (iv).   1

(e) Name the *alaṁkāra in śloka* (iv).   1

5.   Turn into Sanskrit and write explanatory notes in English on   12
any three of the following extracts, referring each to its context :—

(a) कुश्रो किल वम्र प्रच्छी प्रावलीकरिम्र प्रस्सुकारणं पुच्छेसि ।

(b) सेन हि गच्छीवपाचेम्रो होहि । किरं तुर वबवणं तबोवणं
त्ति पेक्खामि ।

(c) पुरवीर जो वरणं सो तुर समीवे वहुर ।

(d) विट्टिम्र धूमावलिश्रविट्टिणोवि अज्ञमाणस्स पाम्रर वब्र
म्राहुरी पढिश्र ।

(e) भट्टालके हुरो श्रह्लं तुम्हाणं श्रुमणोसुह्लं होहु ।

6.   Give the purport of *any one* of the following *ślokas* with clear   6
reference to the context :—

(a) प्राविभूत ज्योतिषां ब्राह्मणानां

ये व्याहारास्तेषु मा संश्रयोऽभूत् ।

भद्रा येषां वार्विखवणीनिषक्ता

द्वेते वाचं विप्लुता व्याहरन्ति ॥

(b) मनोरथस्य यदृशोलं तद्द्वैरेनाद्दिलो इतम् ।
जतायां पूर्व्वकुनायां प्रसूनखागमः कुतः ॥

7. Translate into Sanskrit:—

25

It had been very hot that day, the evening was charming, the dew moistened the withered grass; no wind, a peaceful night; the air was fresh without being cool; the sun after its setting had left in the sky red vapours whose reflection made the water rose-coloured. The trees were loaded with cuckoos, who answered one another. I walked in a sort of ecstasy, delivering my senses and my heart to the enjoyment of all this. Absorbed in my sweet reverie, I prolonged my walk well on into the night without perceiving that I was tired. I noticed it at length. I then lay down with delight. The canopy of my bed was formed by the trees; a cuckoo was just above me; I went to sleep to his song; my sleep was sweet, my dreaming more so.

SANSKRIT.

THIRD HONOURS PAPER.

Examiner—D. R. BHANDARKAR, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *any two* of the following passages into English:—

(a) अथ सदल्वा पूर्व्वभद्रबोधितायां तादृशेऽपि व्यसने नाति-

·15

विह्वला कुलपरिजनानुयाता पद्मामेव धीरमाग्रत्य सखिसुत्तमाङ्ग-
सुलङ्क्न धारयन्त्याखिल्वा रात्रे समादिश्रत्—एष मे पतिस्त्वापकतां
न वेति रैवमेत्र आनाति । न मेऽत्यार्त्ति चिन्तया फलम् । अत्र तु
पाणिग्राहकस्य गतिरनुप्रपद्यमाना भवत्कुलं कलङ्कयेयम् । अतो
ऽनुमन्तुमर्हसि भर्त्रौ सह चिताधिरोहणाय सखिति । श्रुत्वा चैतत्प्रीति-
युक्तः समादिसत्तिलौश्वरः—क्रियतां कुलोचितः संस्कारः । तत्सवोत्तरं
च पश्चिमं विधिसंस्कारमनुभवतु मे भगिनीपतिरिति । चखाखे तु
सत्पतिपिठसकलमन्त्राद्विप्रियसे संस्थिते कामपालोऽपि कालदघ्र त्वेति
स्वभवनोपनयनसमुख्य स्वमाङ्गात्मप्रकाश्नाय सखीपतिरन्यमंस ।
श्रानीतश्र पिता मे विविक्तायां भूमौ दर्भशय्यामधिश्रग्य स्थितोऽभूत् ।
श्रथ सदल्वा सरयासखनमनुष्ठाय चक्रधरं सखीरामन्त्र मुहुरभिप्रवग्य
भवनेवता यत्निवारितपरिजनाक्रन्दिता पितुर्मे श्रयनस्थानमेकाकिनी

प्राविशत् । तत्र च पूर्वमेव पूर्णभद्रोपस्थापितेन च मया वैनतेयतां
गतेन निर्विघ्नीकृतं भर्तारमैक्षत । दृष्टतमा पश्युः पाश्योः पर्यञ्चमुखी
प्रक्षिपस्य मां च सुबुर्सुंहुः प्रस्तुतस्तनी परिष्वज्य ससर्षंवाष्पगद्वदम-
गाश्त् । पुत्र योऽसि जातमात्रः पापया मया परित्यक्तः व किमर्थमेदं
सास्तिनिर्घृणामनुगृह्णासि । अथवैष निरपराघ एव ते जनयिता ।
युक्तमस्य प्रत्यानयनमन्तकाननात् ॥

(b) अवम् य इतविध्वस्तघोधमस्लोतसंसक्तपीतमब्बुन नाविका-   15
नायकमनभिषरमभिपस्य जीवग्राहमग्रहीषम् । अथो चासील्त एव
भौमधन्वा । तं चाइमवबुध्य जातस्रौडमस्रवम्—सात किं दृष्टानि
कृतान्तविलषितानि इति । ते तु षांयाविका सत्रौयेनैव शृङ्खलेन
तमतिगाढं बद्धा इर्षकिलकिलारवमकुर्वन्यां वापूजयन् । सुवौरा तु स्वा
नोरनतुक्रूखवातमुग्ना वूरसभिवस्य कर्मापि द्वीपं निर्त्रिष्टमाश्रिष्टवती ।
तत्र च स्वादु पानीयमेधांसि कन्दमूलफलानि संजिघृत्सवो गाठपाति-
ताग्रलावल्मवातराम । तत्र चासौन्मद्राशैकलः । षोऽइम्—अब्हो
रसवौयोऽयं पर्वतनितम्बभागः कान्तरेयं गस्सपाघावल्पुत्यका
त्रिग्रिरमिदमिन्द्रीवरारविन्दमकारन्दविन्दुचन्द्रकोत्तरं गोत्रवारि रम्यो
ऽयमनेकवर्षीकुसुममञ्जरीभरस्तरवनाभोग इव्यतृप्ततरया दृश्रा बस्तु बहु
पश्यन्नुलस्तिताध्याइछत्तोवौधरत्रिखरः श्रीवौभूतमुस्लुभाभिः पद्मराग-
सोपानश्रिलाभिः किमपिः नाल्रीकपरागघूषरं खरः समध्यागाम् ।
खातस्र कांक्षिद्वृतस्त्वःवूर्न्विषभद्रानास्याद्य अंचलग्रकब्लारस्त्रीरवर्तिना
कोनापि भौमस्येण ब्रह्मराक्षसेनाभिपस्य कोऽसि कुतस्त्योऽसि इति
निर्भत्सेयताम्यधौये । निर्भयेन च मया षोऽभ्यधौयत – षोम्य षो उइमस्मि
द्विजन्मा । अ रुघ्रसार्धवमर्षवाद्यवननाय यवननावस्निग्रावाणासेनं
पर्वतप्रवरं गतो यद्दृक्छयाखिन्धरसि विश्रान्तः । भद्रं तवेति ॥

(c) अयमषं परिवर्तितस्खीवेषसं कन्दा नाम भवेयम् । अनुगतस्र   15
मया स्वमुपगम्य धर्मौषनगतं धर्मवर्धनं वस्त्वसि—समेयमेवौब सुद्विता ।
जातसात्रायां स्वयां जनन्यद्याः संख्यिता । माता च पिता च
सुख्वाइमेव व्यवधंयस् । एतव्यर्थमेव विद्यामयं सुल्कमर्जितुं गतोऽभ्यव-
वन्लिनगरीसुज्जयिनीमसज्वैवाब्कुलजः कोऽपि विप्रशरकः । तस्वें
चेयमनुमता शातुसितरस्मे न योग्या । तसवीभूता चेयम् । ष च

विलम्बितः । तेन समानीय पाणिमथा ग्राह्ययित्वा तस्मिन्न्यस्तभारः
संन्यसिष्ये । दुरभिरचतया च दुर्हृदितृणां मुक्तगैश्चवानां विशेषतस्मा-
मातृकानामिह देवं मातृपितृष्यानीयं प्रजानामापन्नशरणमागतोऽस्मि ।
यदि दृढं ब्राह्मधौतिनमगतिमतिथिं च मामनुग्राह्यपत्ये गणयथादि-
राजचरितधुर्यो देवः षेषा भवन्द्व्रतसच्छायासखच्छित्तचारित्रा
तावदध्यास्तां यावदस्याः पाणिग्राहकमानयेयमिति । स एवमुक्तो
नियतसमभिसनायमानः स्वबुद्धितृषन्निधौ मां वासयिष्यति । आगामिनि
मासि फाल्गुने राजान्तःपुरजनस्य तीर्थयात्रोत्सवो भविष्यति । तीर्थ-
स्यानात्याच्यां दिश्य श्रग्ते वान्तरमलिक्रम्य वानीरवलयमध्यवर्तिनि
कार्त्तिकेयगृहे करतलगतेन शुक्लाम्बरयुगलेन भवान्स्याख्यति । स
खल्वहमनभिग्रङ्क एवेतावन्तं कालं सछ्संभिविद्धत्य राजकनया
भूयस्तस्मिन्नुत्सवे गङ्गामयि विहरन्निहारव्याकुले कन्यकासमाजे मग्रोप-
स्तस्छ्रदभ्यास एवोन्यञ्ज्ञगामि । पुनस्त्वहुपहृते वासस्ती परिधाया-
पनीतदारिकावेषो जामाता नाम भूत्वा ख्वामेवानुगच्छेयम् ।

2. Discuss the correctness of the following:—   10

    (a) प्रनोन्यां इमे ब्राह्मण्यौ भोजयतः ।

    (b) चजयसे खजं भक्तः ।

    (c) यरञुपाळेश्रतः श्राख्यार्थः श्रांधगच्छति तस्मे नमः ।

    (d) ब्रह्मञ्जलिभिः पातु वाताः कंतकगन्धिनः ।

    (e) उग्रं तपस्तपति ।

    (f) स मां विदितभक्तिं मह्यंनिवेदयिष्यति ।

    (g) माता प्रसूततनया जामातृगेहं गता ।

    (h) निरीक्ष्य रेमे प्ररशः कृतार्थतास् ।

3. Explain and illustrate the rule relating to the formation of लिट्   8
with the help of the roots भू, वसँ and ह्र.

4. State the general principle underlying the use of the reflexive   12
voice (कर्संकर्ळ) in Sanskrit. Can all roots be used reflexively? Give
reasons for your answer. Discuss the forms:—

    गच्छति ग्रामं स्वयमेव , पठत्से श्राख्यं स्वयमेव ; मेदिनौ स्वयं
वधूनि दुग्घे ; and चिकीर्षंसे कटः ।

5. Give the third person singular in **भुट्** of the following roots :— 10

ब्री, च, ज्ञ, ज्ञि, हन्, उप + यम्, प्र + ख्या, and सम् + ज्ञ.

Either,

6. (*a*) Write an essay in English or Sanskrit on the philosophy of 30
the Rigveda.   *Or,*

(*b*) Describe the characteristics and functions attached to the 30
following gods and goddesses of the Vedic pantheon :—Dyaus, Varuṇa,
Indra, Savitṛ, Rudra, Aditi, and Bṛhaspati.

SANSKRIT.

FOURTH HONOURS PAPER.

*Examiner—*Bạ̄ʙʋ Asʋᴛosʜ Sᴀsᴛʀɪ, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. (*a*) Translate into English *any two* of the following passages :— 20

(i) ग्रह्वो विघातुरख्याने रूपनिम्याइनयत्नः । तथाहि यदि
नामेयमात्मरूपोपहसिताम्रेघरूपसंपत्त्याद्दिता किमर्यं वपगतस्पर्शसंभो-
गसुखे कृतं कुले जन्म । मन्ये च मातङ्गजाति स्पर्शदोषभयादस्पृश्वतेय-
मुख्याद्दिता प्रज्ञापतिना । अन्यया कयमियमक्लिष्टता लाद्धख्य ॥

(ii) ग्रघ मुहूत्तादिव वेश्मप्रायनः प्रतीहाय्यां गृहीतपष्टुरः कनक-
वेत्रलतावलम्बिना किंचिद्वनतपूर्व्वकायेन · चितकञ्जकावच्छन्नवपुषा
जरा घवलितमौलिना गद्गदस्वरेण मन्दमन्दसंचारिणा विहंगजाति
प्रौढ्या जगत्कलहं मेनेव कञ्वुकिनानुगम्यमानो राजान्तिकमाजगाम ॥

(iii) ग्रघुनापि यत्र जलधरसमये गम्भीरमभिनवजलधरनिवहनि-
नाइमाकर्ण्य भगवतो रामस्य त्रिभुवनविवरव्यापिनस्राघघोषस्य स्मरन्तो
न गृह्नन्ति शष्यकवलमजस्रमप्रुजललुखितदौनवृष्यो बीच्यशूना द्श्र
विश्रो जराजर्जरितविषाणकोटयो ज्ञानकीसंवर्धिता जौव्रसृगाः ॥

(*b*) Give the forms in **भुट्** third person singular of the roots of 8
the words underlined in (i); expound the *samāsas* in the words under-
lined in (ii); and parse the words underlined in (iii).

2. Explain in Sanskrit *any two* of the following extracts:— 16

(a) गुह्य इवाप्रतिहतशक्तिः कमलयोनिरिव विमानीकृतराज-
हंसमण्डलो जलधिरिव लक्ष्मीप्रसूतिर्गङ्गाप्रवाह इव भगीरथपथप्रवृत्तो
रविरिव प्रतिदिवसोपजायमानोदयो मेरुरिव सकलभुवनोपजीव्यमान-
पादच्छायो दिग्जय इवानवरतप्रवृत्तशानाद्रीकृतकरः ॥

(b) उत्सादिताशेषद्विषद्भिन्नमपि ज्वलत्कृपाणापानलमायसलोच-
नमपि सूक्ष्मदर्शनं मद्दोषमपि सकलगुणाधिष्ठानं कुपतिमपि कलत्र-
वल्लभमविरतप्रवृत्तदानमव्यमदमतिशुद्धस्वभावमपि कृष्णचरितमकारमपि
हसदिश्चितसकलभुवनतलं राजानमद्राक्षीत् ॥

(c) प्रावृडिव घनश्यामलानेकप्रतहृदलंकृता च चन्द्रमूर्त्तिरिव
शतलब्धशाखाणुगता हरिव्याख्यासिता च राज्यस्थितिरिव चमरमृग-
वालव्यजनोपशमिता सभद्रगजघटापरिपालितेव गिरितनयेवस्याणु-
संगता मृगपतिषेविता च जानकीव प्रसूनकुश्चलवानिश्चाचरपरि-
गृह्णीता च ॥

3. (a) Explain in Sanskrit *any two* of the following passages:— 12

(i) शक्नोति यो न <u>द्विषतो</u> निहन्तुं विद्यते नाप्यवलैर्<u>द्विभर्त्ति</u>ः ।
स श्रावगाहं कलहं विदध्यादसौत दुर्गादिविवर्त्तुं यश्च ॥

(ii) ब्रह्मर्षिभिर्न्नमयं <u>सर्वे</u>ः सन्तापिते रात्रिचरत्तयाय ।
नराकृतिर्वानरसेनश्चालो जगत्यजय्यो विहितोऽभ्युपायः ॥

(iii) क्रीडन् भुजङ्गैन मृशानुपातं कस्मिद्वाणा <u>जीवति</u> संशयस्थः ।
संसेवमानो नृपतिं प्रभुत्वं तथैव यज्जीवति सोऽल्पलाभः ॥

(b) Parse the word underlined in (i); derive the words underlined 7
in (ii) and give any alternative forms they may have; and derive the
word underlined in (iii).

4. Translate into English *any two* of the following passages:— 12

(a) बद्धो वाचरसक्तुं भौमो रम्भेण लङ्गणसलिलावासे ।
सच्चा संरमरसो कूराद्धविमगण्डलसमो लोले ॥

(b) आयाच समवाहश्चसंहरसंहारद्धिमहरसमच्छायम् ।
वाथां वारिसमूहं संगच्छ पुराणचारुदेहावाषम् ॥

(c) फलभरमन्यरसुवरसविवूरविश्वटद्धारिकुसुमापोडम् ।
हरिणकलङ्कमविश्वसमवश्नहुवारिभरसुगम्भीरगुह्यम् ॥

5. Translate the following passages into Sanskrit :—   25

(a) When the forest fire has passed away owing to the downpour of the near cloud, the tree is threatened by the lightning; he who has escaped from the crocodile's throat must fear to get drowned in the ocean. Thus fate soon creates a fresh terror for the person who has warded off a danger, in order that he may realize the sweetness of the good fortune which he is to enjoy afterwards.

(b) One is not to be called a mendicant for his having only renounced his possessions, or. for his having only adopted a life of dependence on charity. He who renounces the possessions and pleasures of the world in a sincere frame of mind is to be regarded a true mendicant. Unattached at heart though attached in outward show, standing aloof from the world, having broken all his bonds, and regarding friend and foe alike, such a man, O king, is regarded to be emancipated.

SANSKRIT.

FIFTH HONOURS PAPER.

Examiner—BABU SURENDRANATH MAJUMDAR, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *any four* of the following extracts :—   16

(a) य इँखयं॑ति॒ पर्व॑तान्‌ ति॒रः ष॑मु॒द्रम॒र्ण॑वं ।
मरु॑द्भिरग्र॒ आ गहि ॥
आ ये तन्व॑ंति र॒श्मिभि॑स्ति॒रः स॑मु॒द्रमोज॑सा ।
मरु॑द्भिरग्र॒ आ गहि ॥

(b) ता वां॒ वास्तू॑न्यु॒श्मसि॒ गम॑ध्यै
य॒त्र॒ गावो॒ भूरि॑शृंगा॒ अया॑सः ।
अ॒त्राह॒ तदु॑रुगा॒यस्य॒ वृष्णः॑
पर॒मं प॒दम॒व॑ भाति॒ भूरि॑ ॥

(c) द्यावा॑ चि॒त्स्मे पृ॑थि॒वी न॑मेते॒
शुष्मा॑च्चि॒द॒स्य पर्व॑ता भयंते ।
यः सो॒मपा॒ निचि॑तो व॒ज्रबा॑हु-
र्यो व॒ज्रह॑स्तः॒ स जना॑स॒ इंद्रः॑ ॥

(d) प्रत्क्षां वो देवीमुषसं विभातीं
प्र वो भरध्वं नमसा सुवृक्तिं ।
ऊर्ध्वं मधुधा दिवि पाजो अश्रेत्
प्र रोचना रुरुचे रण्वसंदृक् ॥

(e) देवेभ्यो हि प्रथमं यज्ञियेभ्यो-
ऽमृतत्वं सुवसि भागमुत्तमं ।
आदिद्दामानं सवितर्व्यूर्णुषे-
ऽनूचीना जीविता मानुषेभ्यः ॥

2. Explain in Sanskrit *any five* of the following extracts, and comment on *any three* of the Vedic archaisms in *each* of those *five* :— 35

(a) त्वं विश्वस्य मेधिर दिवश्च रमश्च राजसि ।
स यामनि प्रतिश्रुधि ॥
उदुत्तमं मुमुग्धि नो वि पाशं मध्यमं चृत ।
अवाधमानि जीवसे ॥

(b) अद्या देवा उदिता सूर्यस्य
निरंहसः पिप्रता निरवद्यात् ।
तन्नो मित्रो वरुणो मामहन्ता-
मदितिः सिंधुः पृथिवी उत द्यौः ॥

(c) स आयमानः परमे व्योम-
न्नाविरग्निरभवन्मातरिश्वने ।
अथ क्रत्वा समिधानस्य मज्मना
प्र द्यावा शोचिः पृथिवी अरोचयत् ॥

(d) सुषां आदित्यो नमसोपसद्यो
यात यज्ञानो गृणते सुम्नैवः ।
तस्मा एतत् पन्यतमाय जुष्ट-
मग्नौ मित्राय हविरा जुहोत ॥

(e) रथेन पृथुपाजसा दाश्वांसमुप गच्छतं
इंद्रवायू इहागतं ॥
इंद्रवायू अयं सुतस्तं देवेभिः सजोषसा ।
पिबतं दाशुषो गृहे ॥

(f) वीतिषदं त्वा कवे द्युमंतं समिधीमहि ।
    अग्ने हवन्तमध्वरे ॥
अग्ने विश्वेभिरा गहि देवेभिर्हव्यदातये ।
    होतारं त्वा वृणीमहे ॥

(g) दिवो नो वृष्टिं मरुतो ररीध्वं
    प पिन्वत वृष्णो अश्वस्य धाराः ।
अर्वाङेतेन स्तनयित्नुने-
    ह्यपो निषिंचन्नसुरः पिता नः ॥

3. Translate into English :—   5

अन्ये त्वन्यथा वर्णयन्ति । पुरा किलेन्द्रादयो वैन्ययज्ञं समाजग्मुः ।
श्रुतमदोऽपि तत्रागत्य सदस्यासीत् । देव्याब्लेन्द्रजिग्यांसया तत्र समा-
गमन् । तान् दृष्ट्वा निर्जगामेन्द्रो यज्ञात् श्रुतमश्चाकृतिः । स च श्रुतमदो
वैन्येन पूजितो यच्चवादाग्निरगच्छत् । निर्गच्छन्तं तमृषिं दृष्ट्वा अयमेवेन्द्र
इति मन्यमानास्तमसुराः परिवव्रुः ॥

4. Narrate the legend of शुनःशेप the *ṛṣi* of the Varuṇasūkta (no. 2)   5
of your text.

5. Mention the chief characteristics of Varuṇa and of Indra.   12

6. Give the corresponding classical Sanskrit forms for *any eight* of   8
the following :—

    सहः । नाभा ॥ अकः । करत् । कगमहे । तारिषत् । सौमहि ।
वोचावहै । गमध्यै । ववृत्स्व ॥

7. Give the meanings of *any eight* of the following :—   8

    तय । रजस् । सुतन्त्र । सृळीक । क्ष्त्र । स्वस्र । दम । वृत्र ।
द्युम्न । इळा ॥

8. (a) Illustrate the *Vedic uses* of (i) the *Upasargas*, and of (ii) चित्   4
(the Classical Sanskrit suffix in कस्मिन् &c.).

    (b) Give the following forms of *declension* :—   5
       (i) *Two Vedic* forms of masculine nouns ending in *a*.
       (ii) *One Vedic* form of neuter nouns ending in *a*.
       (iii) *Two Vedic* forms of feminine nouns ending in *ī*.
    (c) Exemplify :—   2
               Either,

Two phonetic peculiarities of the Vedic dialect.

               Or,

' In the Veda are found certain second persons singular made by
adding the ending *si* of the present indicative, and having an impera-
tive sense.'

SANSKRIT.

Sixth Honours Paper.

Examiner—RAI RAJENDRACHANDRA SASTRI, BAHADUR, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

A. Grammar.

Answer any TWO *questions of Group* A, *and any* THREE *of Group* B.

Group A.

1. Discuss the question of import of a *Prātipadika*, and refer to the divergence of opinion on the subject.　　　　12

2. Discuss the correctness of the following sentences :—　　12

   (a) अग्निप्रहरत् तं जनको धनुस्तत् ।

   (b) तुभ्यं तर्यं मन्ये ।

   (c) श्रीदनस्य पाचकः, पुत्रपौत्राणां दर्शकः ।

   (d) योऽस्मान् द्वेष्टि यं च वयं द्विष्मः ।

   (e) नास्ति घटोऽनुपलब्धेः ।

   (f) कुमार्ये इव कान्तस्य व्रजन्ति स्पृहयन्ति च ।

   (g) दानीयो विप्रः ।

   (h) पञ्चकेन पशून् क्रीणाति ।

3. Give the meanings of the underlined particles in the following :—　　12

   (a) धिक् जाल्मं दैवदत्तमु अपि सिञ्चेत् पलाण्डुमु ।

   (b) जपमनु प्रावर्षत् ।

   (c) वपिटोऽपि स्यात् ।

   (d) अन्वर्जुनं योद्धारः ।

   (e) प्रतिदेवान् कृष्णाः ।

   (f) यत्र समाभिव्यात् तद्वीयताम् ।

   (g) उपखाट्यां द्रोणः ।

   (h) तिलेभ्यः प्रति यच्छति माषान् ।

GROUP B.

4. Explain and illustrate :—　　　　　　　　　　　　　　12

　　(a) एकविभक्ति चापूर्वनिपाते ।

　　(b) उपपदमतिङ् ।

　　(c) कारनाम्नि च प्रायां ड्लादौ ।

　　(d) वृद्धिनिमित्तस्य च तद्धितस्यारक्तविकारे ।

5. Give the non-compound forms of the following, referring to　12
rules of grammar where necessary :—

व्याघ्री, कुम्भकारः, मद्राविशिष्टः, मद्रसेवा, अतिस्त्री, वानरस्था,
गोगर्भिण्डी, कोटतन्त्रः, केयय्युपदम्, खास्तमोदता, and अधरोत्तरम्.

6. Explain and illustrate the principal rules relating to पुंद्भाव in　12
the वड्डत्रीषि compound.

7. Account for the *samāsas* in the following :—　　　　　12

चन्दनगन्धः, घटडपसु, भाष्याब्धिः (क्रातिगम्भीरः), प्रबन्धेहः,
त्रिभुवनविधाता, अश्वघासः, अर्घगौरवम्, and पश्चिमरात्रः.

B. RHETORIC.

Answer any FIVE *questions.*

8. Discuss : –　　　　　　　　　　　　　　　　　　　3

श्लेषः सर्वासु पुष्णाति प्रायोवक्रोक्तिषु प्रियम् ।
भिन्नं द्विधा स्वभावोक्तिर्वक्रोक्तिश्चेति वाङ्मयम् ॥

9. Explain and illustrate some of the important varieties of उपमा　8
mentioned by Daṇḍin.

10. Define and illustrate with examples the following *alaṅkāras :*—　8

विभावना, व्यतिरेक, समासोक्ति, निदर्शना, and प्रेयः.

11. Discuss the *alaṅkāras* in the following :—　　　　　8

　　(a) धन्याति देवर्भिं गुणैरुदारैर्यया समाक्तष्यत नैषधोऽपि ।
　　　　इतः स्तुतिः का खलु चन्द्रिकाया यदब्धिमप्युत्तरलीकरोति ॥

　　(b) पयोमुचः परीतापं हरन्त्येव शरीरिणाम् ।
　　　　नव्यात्मलाभो महतां परदुःखोपशान्तये ॥

　　(c) इठमूलः फलभरैः पुष्णान्निश्रमर्थिनः ।
　　　　सान्द्रच्छायो महानृक्षः सोऽयमासादितो मया ॥

(d) प्रतिकूलतामुपगते द्वि विधो विफलत्वमेति बहुसाधनता ।
अवलम्बनाय दिनभर्तुं रघुन्न पतिष्यतः करग्रहत्वमपि ॥

12. Discuss:— 8

निद्रुतोद्गीर्णवान्ताति गोब्दवृत्तिव्यपाश्रयम् ।
प्रतिसुन्दरमन्यत्र ग्राम्यकत्तां विगाहते ॥

13. Explain and illustrate:— 8

अलङ्कारान्तरायामध्यक्समाहुः परायणम् ।
वाग्गोश्चमर्थिताम्युक्तिमिमामतिशयाङ्गुयाम् ॥

14. Explain the different kinds of प्रस्तावना mentioned in the 8
Sāhitya-darpaṇa, and illustrate the same with examples from your
texts.

SANSKRIT.

Paper-setters—
- Hon. Sir Asutosh Mukherjee,, Kt., C.S.I., M.A., D.L.
- Mahamahopadhyaya Kaliprasanna Bhat-tacharyya, M.A.
- Babu Brajalal Chakravarti, M.A., B.L.
- Babu Abinaschandra Guha, M.A.

First Pass Paper.

Examiners—
- Babu Jogendranath Bhattacharyya, M.A.
- Babu Biharilal Banerjee, M.A.
- Babu Bhagabatkumar Sastri, M.A.
- Babu Surendranath Bhattacharyya, M.A.
- Babu Kasinath Das.

*Candidates are required to give their answers in their own words
as far as practicable.*

•

The figures in the margin indicate full marks.

Either,

1. (a) Trace briefly in English the process of world-creation, as 8
delineated in the first chapter of Manu.

Or,

(b) Give a synopsis in English of Draupadi's exhortation to Yu-
dhiṣṭhira in the first Canto of the *Kirātārjunīya.*

2. Explain in Sanskrit, after Mallinātha, *either* of the following   10
stanzas:—

    (a) सखीनिव प्रीतियुजोऽनुजीविनः

        समानमानान् सुहृदश्च बन्धुभिः ।

      स सन्तं दर्शयसे गतक्षयः

        कृताधिपत्यामिव साधु बन्धुताम् ॥

    (b) सुखेन लभ्या दधतः कृषीवलै-

        रकृष्टपच्या इव सस्यसम्पदः ।

      वितन्वति क्षेममदेवमातृका-

        स्त्वराय तस्मिन् कुरवश्चकाशति ॥

3. (a) Translate into English *any three* of the following *ślokas*:—   21

    (i) ततः स्वयंभूर्भगवानयत्नतो थेष्वयज्ञिरेषु ।

        महाभूतानि वृत्तौजाः प्रादुरासीत्तमोनुदः ॥

    (ii) एवं स जाग्रत्स्वप्नाभ्यामिदं सर्वं चराचरम् ।

        संजीवयति चाजस्रं प्रसापयति चाव्ययः ॥

    (iii) आष्टमाद्दशमाद्वर्षं तु शतवर्षं तु भूमिपम् ।

        पितापुत्रौ विजानीयाद्ब्राह्मणस्तु तयोः पिता ॥

    (iv) यश्रोचत वीच्या मानिनौ

        परितः खेदसयेन चतुघा ।

      अपि वागधिपस्य दुर्वचं

        वचनं तद्विधौत विक्षयम् ॥

    (v) ज्वलत्खव जातवेदसः

        सततं वैरिकृतस्य चेतसि ।

      विदधातु शमं श्रिवेतरा

        रिपुनागनयनाम्बुसन्ततिः ॥

    (b) Change the voice completely in (a) (i) *or* (a) (iv).   4

    (c) Derive प्रसापयति in (a) (ii), and give the ङि, third person,   2
singular, of its root.

    (d) Explain the formation of the compound पितापुत्रौ in (a) (iii).   3
What case is तयोः, and why?

(e) What is the meaning of the suffix घ्यञट् in वेदसवेन, in (a)(iv) ? 3
Comment on the use of the genitive in वाग्विपश्च.

4. Elucidate briefly in English the leading idea in *each* of the
following extracts :—

(a) सर्वेषां तु स नामानि कर्माणि च पृथक् पृथक् ।
वेदग्रब्देभ्य एवादौ पृथक् संख्याश्च निर्मेमे ॥ 4

(b) उपपत्तिसहाकृता बला- 3
ग्नुमानेन न चागमः सतः ।

5. Translate into English *either* of the following passages :— 7

(a) ननु मनुप्रणीतत्वेऽस्य शास्त्रस्य स पृष्टः प्रत्युवाचेति न युक्तम् ।
ग्रयं पृष्टो ब्रवीमीति युज्यते । ग्रन्यप्रणीतत्वे च कथं मानवीयसंहितेति ।
उच्यते । प्रायेणाचार्याणामियं शैली यत् स्वाभिप्रायमपि परोप-
देग्रमिव वर्णयन्ति ।

(यथा केनचित्कृततीर्थे पयसि गम्भीरेऽपि प्रवेष्टारः सन्ति
तीर्थकारस्तु विरलास्तद्गीतावपि निगूढमपि तत्त्वं वक्तरि सति बोद्धारः
सन्ति वक्ता तु न सुलभः । अत इयं च साधु वक्तीति युज्यते विसय
इति तात्पर्याथः ।

6. (a) Account for the *vivhaktis* in *any four* of the underlined words 8
in the following extracts :—

(i) तस्मिन्मुग्धे स भगवानुशिष्या परिवत्सरम् ।
(ii) इदं शास्त्रं तु कृत्वासौ मामेव स्वयमादितः ।
विधिवद् ग्राहयामास ।
(iii) गुरो वसन् संचिनुयद्ब्रह्माधिगतिकं तपः ।
(iv) द्विषां विघाताय विधातुमिच्छतः ।
(v) हितानु यः संशृणुते स किं प्रभुः ।
(vi) परैति काष्ठां यशसा समं वपुः ।

(b) Justify the use of the singular in ऋचते in— 2

धर्मांघोबुच्यते त्रियः ।

7. Translate into Sanskrit *any two* of the iollowing passages :— 25
(a) The king Soma was among the Gandharvas. The gods and
the sages were constantly thinking of him : 'How may this king
Soma come unto us ?' Vāc (वाच्) said, 'The Gandharvas long for
women. Buy with *me*, who am a woman, too.' ' No,' said the gods.

19

'how can we be without thee?' 'Buy, by all means,' said she, 'whenever you will have need of me, I shall return unto you.' 'Very well.' They bought the king Soma with her.

(*b*) The midland people were celebrating a sacrificial session (यज) on the banks of the Sarasvatī. And Kavaṣa sat in the midst of it. 'Thou art,' they said to him, 'thou art the son of a slave-girl. We will not eat with thee.' He ran away in a rage and glorified the Sarasvatī with this hymn (ऋक्). She came up at his heels. Then they regarded him as free from sin. And, turning round, they said, 'We salute thee, O sage! Do not kill us. Thou, whom she is following, art verily the noblest amongst us.'

(*c*) 'I must study the Vedānta.'

'Admirable! Are you, however, aware that the Vedānta is but the end of the Veda? Surely, you can't climb to the top at once.'

'Then I shall study the Veda first.'

'You are "twice-born," I hope?'

'Oh yes, I am a Brahmin, and am duly invested with the sacred cord too.'

'Well, but there are three Vedas, namely the *Ṛgveda*, the *Yajurveda*, and the *Sāmaveda*. Why, there's a fourth as well, the *Atharvaveda*. Which of them would you study?'

SANSKRIT.

SECOND PASS PAPER.

Examiners— BABU SATKARI ADHIKARY, M.A.
BABU SURENDRANATH MAJUMDAR, M.A.
BABU KOKILESWER SASTRI, M.A.
BABU MATILAL BHATTACHARYYA, M.A.
BABU KASINATH DAS.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Either,

1. (*a*) Give briefly, in English, the substance of the conversation 5 between King Dushyanta and the disciples of Kaṇva and Śakuntalā, as given in Canto V of the *Sakuntalā*.

Or,

(*b*) The soliloquy of Janaka, as given in Canto IV of the *Uttara-rāmacharita*.

2. (*a*) Translate into English *either* of the following groups:— 12

GROUP A.

(i) श्रीवाभङ्गाभिरामं मुहुरनुपतति स्यन्दने बद्धदृष्टिः
पश्चार्द्धेन प्रविष्टः शरपवनभयादभ्यूयया पूर्वकायम् ।

दर्भैरर्द्धावलीढैः श्रमविवृतमुखसंत्रिभिः कीर्णवर्त्मा
पथ्योद्यत्प्रतल्वाद्द्रियति बहुतरं श्लोकमुर्व्यां प्रयाति ॥

(ii) किमत्रोच्यते प्रथवः खलु प्रकर्षपर्य्यन्तः शैश्वे परमं चैत-
दन्योन्यसंश्लेषणं पित्रो :—

श्रन्तः कारणतस्त्रय दम्पत्योः शैश्वसंप्रयात् ।
श्रानन्दयन्यरेकोऽयमपत्यमितिबध्यते ॥

GROUP B.

(i) सौमं केनचिद्बिन्दुपाण्डु तदथा माङ्गल्यमाविष्कृतं
निष्युतस्त्रग्योपरागसुलभो लाक्षारसः केनचित् ।
श्रन्येभ्यो वनदेवताकरतलैरापर्वभागोद्गिते
ईत्तान्याभरणानि तत्किसलयोर्द्दंप्रतिद्वन्द्विभिः ॥

(ii) वसे ब्राभ्यतिकमेवेतद् दुःखिनैदुंःखनिवृौपणानि ।
यतः – पूरोत्पौडे सडागस्य परीवाहः प्रतिक्रिया ।
शेक्ततोमे च छ्रयं प्रलापैरेव धार्य्यते ॥

(b) Explain the formation of, and parse, पश्चार्द्देन and भूयसा in 6
śloka (i), and चपत्यम् in *śloka* (ii), Group A.

(c) Derive चवक्रौड in *śloka* (i), Group A, and निष्युत in *śloka* (i), 6
Group B, and give the forms of the roots, in third person singular,
in लट् (present tense) and क्षिट् (past tense).

(d) Expound and name the *samāsas* in पूर्वेकार्यम् in *śloka* (i), 4
Group A, and चापर्वभागोद्गितैः in *śloka* (i), Group B.

(e) Derive दम्पत्योः in *śloka* (ii), Group A, and सौमम् माङ्गल्यम् in 3
śloka (i), Group B.

(f) Explain the formation of परीवाहं, and account for the singu- 2
lar use in शोक्ततोमे in *śloka* (ii), Group B.

3. (a) Refer to the context, and give in your own Sanskrit, the 14
substance of the *ślokas* in *either* of the following groups :—

GROUP A.

(i) श्रमप्रधानेषु तपोधनेषु गूढं हि दाहात्मकमस्ति तेजः ।
स्वभ्रानुकूला इव सूर्य्यकान्तास्तदन्यतेजोऽभिभवाद्वमन्ति ॥

(ii) बत्तानवाष्टौन्यपि मानुषाख्यं

दुःखानि षड्द्रव्यवियोगजानि ।

दृष्टे जणे प्रियषि दुःषहानि

स्त्रोतःषङ्खैरिव संप्लवन्ते ॥

GROUP B.

(i) यद्युत्तिष्ठति वर्णेभ्यो नृपाणां त्तयितत्फलम् ।

तपःषड्भागमत्त्यं ददत्यारण्यका हि नः ॥

(ii) यथा तिरश्चीनमलातश्रलं

प्रत्युप्तमन्तः षविषम्य इंश्रः ।

तथैव तीव्रो हृदि श्रोकश्रङ्कु-

र्मैस्मींषि कृन्तन्नपि किं न षोढुः ॥

(b) Change the voice of the first line of *śloka* (i), Group A.   2

(c) Expound the *samāsas* in तपःषड्भागम्, and say in what विभक्ति   2
is नः in *śloka* (i), Group B.

(d) Derive प्रियषि in *śloka* (ii), Group A, and give the nominative   2
plural form of its base.

(e) Derive चारण्यक in *śloka* (i), and तिरश्चीन and प्रत्युप्त in *śloka*   5
(ii), Group B, and give the लिट् (past tense), and लुङ् (aorist) third
person singular forms of the root of the last word (प्रत्युप्त).

(f) Write grammatical notes on उत्तिष्ठति in *śloka* (i), Group B.   2

4. (a) Explain, in English, the allusions in the following extracts:—   4

(i) सुखपरस्य हरेरुभयैः कृतं

त्रिदिवसुद्धतदानवकण्टकम् ।

तव श्ररेरधुनानतपर्वभिः

पुरुषकेश्ररिणश्च पुरा नखैः ॥

(ii) तुरगविजयश्रयानुद्धूर्णैभिदः सगाग्धरे

कपिलसह्यसामर्घात् प्रष्ठान् पुरा प्रपितामहान् ।

श्रगणिततनूपातं तप्त्वा तपांषि भगीरथो

भगवति तव स्पृष्टानद्भिस्त्रिराहुर्ददीधरत् ॥

(b) Give the लट् (present tense) third person singular form of   3
the root of तप्त्वा, and parse ष्टिरात् in *śloka* (ii), and expound the
samāsas in उद्धतदानवकण्टकम् in *śloka* (i).

5. Translate *either* of the following into English :— 3

(a) ग्रासम्वष्टरिग्रपष्टुर व्रसन्तमासब्ख औग्रषव्रुस्ख ।
दिह्रो षि चूग्रक्तोरघ्र उहुमझुल्ख तुमं पष्चायमि ॥

(b) तुमं षि मय चूग्रझ्तुर दिख्रो कामब्ख गद्धिग्रधग्र्ग्रुस्ख ।
पद्धिग्रज्जग्ज्जुवष्ख्टलक्वो पज्ख्ब्मद्धिग्रि ग्रो द्धोद्धि ॥

6. Translate *any five* of the following extracts into Sanskrit :— 25

(a) There is in the territory of Kâlinga a city of the name of Śobhâvati. In it there was a wise Brâhmaṇa, named Yaśaskara, who had offered many sacrifices, and had an excellent wife, named Mekhalâ.

(b) There the moon, that gladdens the eyes of the happy, rose up, adorning the face of the east ; and though it lit up the quarters of the sky, it closed in me all hope of life.

(c) When the Brâhmaṇa had told his story in these words, the prince said to the other Brâhmaṇa, ' I am much pleased ; now tell me, how did you escape from so great a danger ? '.

(d) Once on a time a king of the Daityas, desiring a son, went to the bank of the Ganges, and with his wife performed asceticism for a hundred years to propitiate Brahmâ.

(e) When the ambassador said this, the whole court was in a state of excitement ; but the king, though in wrath, said, ' Away with you, your person is inviolable, otherwise you could not have escaped alive.'

(f) There a combat took place between the gods and Asuras, and Vidyutprabha rushed in wrath upon Indra. And Indra, finding himself gradually worsted by the Daitya in the interchange of missiles, flung his thunderbolt at him.

SANSKRIT.

THIRD PASS PAPER.

Examiners—
⎧ Babu Harihar Banerjee. M.A.
⎪ Babu Pasupatinath Bhattacharyya, M.A.
⎨ Babu Bhabeschandra Banerjee, M.A.
⎪ Babu Debendrakumar Banerjee, M.A.
⎩ Babu Kasinath Das.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *any three* of the following passages into English :— 30

(a) देव ग्रिरिषि देवखाच्चामाङ्गायेनं निर्दोषं वेषं स्वौकृत्य माल-
वेन्ननगरं प्रविश्य तन्न गूढतरं वर्तमानः तख गच्छः समस्तधुरन्तजातं

विविद्ध्वा प्रष्यागमम् । मानी मानधारः स्वैधनिकायुक्तान्तराये संपराये
भवतः पराजयमनुभूय वैलच्छ्वलच्छद्वृयो वीतदयो महाकाखनिवाधिनं
कालौविलाधिनमनश्वरं महेश्वरं समाराध्य तपः प्रभावसंत्तुष्टादखादेव
क्षौरारातिप्नौं भवद्भां रादं खम्खात्मानसप्रतिभटं मन्यमानो महाभिमानो
भवन्तसभियोक्तुमुद्यङ्क्ते ।

(b) निजराज्याभिलाषी मितभाषी खोमकुलावतंखो राजहंखो
मुनिवभाषत । भगवन् मानधारः प्रबलेन देवबलेन मां निर्जित्य
मद्वीयं राज्यमनुभवति । तद्वसम्युग्रं तपो विरच्य तमरातिमुन्मूलयि-
ष्यामि खोकश्वरख्येन भवत्कारख्येनेति नियमवन्तं भवन्तं प्राप्स्यमिति ।
ततस्खिकालच्चस्तपो धनो राजानमवोचत् । खखे श्रीरकार्श्यकारिणा
तपधाखम् । वसुमतीगर्भस्यः सकलरिपुकुलमर्दनो राजनन्दनो नूनं
संभविष्यति । कंचन कालं त्र्षणीमास्खेति ।

(c) ततो मघंय भगवन् प्रभूमिरेधा श्रापख्व द्वयनुनाख्यमानो ऽपि
विबुधैः खपाध्याय स्खलितमेकं त्तमस्खेति बद्धाञ्जलिपुटैः प्रसाद्यमानो
ऽपि स्वशिष्यैः पुत्तमाक्रूष्याख्यापखः प्रत्यूद्ममिति निब्वार्यमाखोऽप्यत्रिया
रोषावेश्वविवश्नो दुर्वीष्वा दुर्विनीते व्यपनयामिसे विद्याजनितासुन्न-
तिमिमासु श्रधस्याद्रक मर्घलोकम् इत्युक्ता तक्षापोश्वकं विषखजे ।

(d) श्रन्यस्मिन् दिवसे भैरवाचार्योऽपि राजानं दृष्टं भयौ तस्मे च
राजा खान्तःपुरं सपरिजनं षकोषमात्मानं निवेदितवान् । ष च विह्वखो-
वाच तात कु विभवाः कु च वयं वनबर्ह्तिताः । धनोष्मणा ज्ञायत्वलं
लतेव मनस्खिता । श्रस्राकमियमपरोपतापिनी राजसे तेजस्खिता ।
भवादृश्रा एव भाजनं भूतेः इति । स्खित्वा च कञ्चित् कालं जगाम ।

2. (a) Give the forms, in the third case-ending singular and plural,
of *any four* of the following words:— 8

निर्जर, निश्रा, वारिवाद्, श्वेतवाद्, मघवत्, and तृ॒ष्वहन्.

(b) Give the forms in जुड़ and जुष, third person singular, of *any*
four of the following roots:— 8

ब्रू, दन्श्, इश्, तुद, म्रष्, and खज्.

(c) Give the derivation of *any three* of the following words:— 6

वातमज, मुक्त, विद्दुष, कासमुघा, यायजूक, and ग्रौषछेद्य.

Either,

3. (*a*) Give the various instances in which a word takes the second 6
case-ending.

Or,

Account for the case-endings in the words underlined in the following passages:—

(i) मासेन व्याकरणमधीते ।

(ii) केषेषु चमरीं चरन्ति ।

(iii) प्रष्नमेधेन यजेत ।

(*b*) Explain the *samāsas* in *any three* of the following words:— 6

कृष्णासर्पः, एकवीरः, सप्तैषयः, and नीललोहितः.

4. Correct or justify *any three* of the following:— 6

(*a*) प्रतिवद्भ्यो सद्भ्यो नमः ।

(*b*) सप्तः फलानां विधाता ।

(*c*) शत्रुं पराजयति राजा ।

(*d*) सुगन्धं पुष्पं चिनोति ।

(*e*) श्रीकान्तेन देवा उपासितव्याः ।

Either,

5. (*a*) Explain the position of the *Mahābhārata* in the Sanskrit 10
literature, and discuss the date and the method of its composition.

Or,

(*b*) Trace the growth of the drama in Sanskrit, and notice the
special features of it with illustrations from some important works.

Either,

6. (*a*) Give an account of the ethical poetry in Sanskrit, with notes 10
on some of the important works.

Or,

(*b*) Give the cardinal doctrines of Hindu philosophy, and give
an account of the Saṁkhyā system.

7. Write notes on *any two* of the authors named below, with an 10
account of the works of each:—Bāṇa, Bhartṛihari, Çrīharsha, and
Dāmodara Miçra.

PALI.

Paper-setters—
{ MAHAMAHOPADHYAYA DR. SATISCHANDRA
VIDYABHUSHAN, M.A., PH.D.
BABU REBATINATH CHATTERJEE, M.A.
BABU SURENDRANATH MAJUMDAR, M.A.

FIRST HONOURS PAPER.

Examiner—BABU SAILENDRANATH MITRA, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Give a full account of the several versions of the Dhammapada,　10
noting especially any reference or references that may point to the
authorship of the text.

2. Quote or refer to passages in the Dhammapada containing *any*　8
four of the following ideas:—

　(*a*) the disinction only 'of colour, but not of caste, in Buddhistic
India;

　(*b*) human body as compared to a tabernacle;

　(*c*) equanimity of the wise compared to a solid rock unshaken
by storm;

　(*d*) insatiety of greed even by a shower of gold pieces;

　(*e*) the possession of grey hair does not necessarily indicate the
" Elder."

3. Translate into English *any four* of the following, clearing all　20
ambiguities and fully explaining the words italicised:—

　(*a*) Na tāvatā dhammadharo yāvatā bahu bhāsati
　　　Yo ca appaṁ pi sutvāna *dhammaṁ kāyena passati*
　　　sa ve dhammadharo hoti yo dhammaṁ na-ppamajjati.
　　　Na tena hoti dhammaṭṭho *yen'atthaṁ sahasā naye,*
　　　Yo ca attham anatthañ ca ubho niccheyya paṇḍito

　(*b*) Attanā va kātaṁ pāpam attanā samkilissati,
　　　attanā akataṁ pāpam attanā va visujjhati,
　　　suddhī asuddhī paccattam nāñño aññaṁ visodhaye.
　　　Attadatthaṁ paratthena bahunāpi na hāpaye,
　　　attadatthaṁ abhiññāya sadatthapasuto siyā.

　(*c*) Na sīlabbatamattena bāhusaccena vā puna
　　　athavā samādhilābhena viviccasayanena vā
　　　Phusāmi *nekkhammasukham* aputhujjanasevitaṁ;
　　　bhikkhu vissāsamāpādi appatto āsavakkhayaṁ.

　(*d*) Yogā ve jāyatī bhūrī ayogā bhūrisaṁkhayo
　　　etaṁ dvedhāpathaṁ ñatvā *bhavāya vibhavāya* ca
　　　tath' attānam niveseyya yathā bhūrī pavaḍḍhati.
　　　Vanaṁ chindatha, mā rukkham, vanato jāyati bhayaṁ
　　　chetvā vanaṁ vanathañ ca nibbanā hotha bhikkhavo.

　(*e*) Yesañ ca susamāraddha niccaṁ kāyagatā sati
　　　akiccan te na sevanti kicce sātaccakārino,
　　　satānaṁ sampajānānam atthaṁ gacchanti āsavā
　　　Mātaraṁ pitaraṁ hantvā rājano dve ca khattiye
　　　ratthaṁ sānucaraṁ hantvā *anīgho yāti brāhmaṇo.*

4. (a) Parse *āpādi*, derive *bāhusaccena* and *appatto* in (c) and .disjoin *sadatthapasuto* in (b) above.   2

(b) How are desiderative and denominative verbs formed in Pali ? Give three examples of each.   4

(c) Decline the bases of *any three* of the following:—   3

bhūrī, in the instrumental, *satānaṁ* in the ablative ; *ubho* in the genitive, and *bahu* in the dative cases.

(d) Conjugate in the second person plural the roots of *any three* of the following:—   3

niccheyya in the past preterite (parokkhā) ; *naye* in the optative (sattamī) ; *ñatvā* in the present tense (vattamānā); and *chindatha* in the aorist (ajjatanī).

(e) Name and expound the samāsas in *any two* of the follow ing :—   2

samādhilābhena, viviccasayanena, and *ne kkhammasukhaṁ.*

(f) Comment fully on *āsavā.*   2

5. Explain according to the Commentator " *sabbe sattā āhāraṭṭhitikā.*" Refute or justify in the light of the commentator Max Müller's rendering of *āhāra* (enjoyment), occurring in the following lines from the Dhammapada :—   4

" Yassāsavā parikkhīṇā *āhāre* ca anissito suññato animitto ca vimokho yassa gocaro ākāse va sakuntanaṁ padaṁ tassa durannayaṁ."

6. Give *in your own Pāli* the substance of *either* of the following:— the *Jarāvagga, the Ratanasutta.*   6

7. Discuss the date and the authorship of the text of the Khuddakapātha.   6

Or,

8 Write in your own Pāli a note as to the training of novices in so far as the same appears from the way in which Kumārapañha is composed.   6

8. Translate into English : —   30

(a) Kin tav' attho vane tāta Ujjuhāno va pāvuso, verambā ramaṇīyā te, paviveko hi jhāyinaṁ. Yathā abbhāni verambo vāto mudati pāvuso, saññā me abhikīranti vivekapaṭisaññutā. Apandaro aṇḍasambhavo sīvathikāya niketacāriko uppādayateva me satiṁ sandehasmi virāganissitaṁ. Yañ ca aññe na rakkhanti yo ca aññe na rakkhati, sa ve bhikkhu sukhaṁ seti kāmesu anapekkhavā. Acchodikā puthusilā gonaṅgulamigāyutā ambusevālasañchannā te selā ramayanti maṁ. vasitaṁ me araññesu kandarāsu guhāsu ca sonāsanesu pantesu vālamiganisevite, ime haññantu vajjhantu dukkhaṁ pappontu pāṇino, saṁkappaṁ nābhijānāmi anariyaṁ dosasaṁhitaṁ. pariciṇṇo mayā Satthā, kataṁ Buddhassa sāsanaṁ ohito garuko bhāro, bhavanetti samūhaṭā.

(b) Kālakā bhamaravaṇṇasadisâ vellitaggâ mama muddhajâ ahum te jarāya sāṇavâkasadisâ saccavâdivacanam anaññathâ.

vâsito va surabhikarandako pupphapûram mama uttamaṅ-
gabhu
tam jaraya sasalomagandhikam saccavâdivacanam anaṅ-
ñathā,
kânanam va sahitam suropitam kocchasûcivicitaggasobhi
tam
tam jaraya viraḷam tahim tahim saccavâdivacanam anaṅ-
ñathâ.

PALI.

SECOND HONOURS PAPER.

Examiner—MAHAMAHOPADHYAYA DR. SATISCHANDRA VIDYA-
BHUSHAN, M.A., PH.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate the following into English :—   15
    (a) Katham bhante Nāgasena yattha cakkhuviññāṇaṁ uppajjati
tattha manoviññāṇam pi uppajjatīti. Ninnattā ca mahārāja dvārat-
tā ca ciṇṇattā ca samudācaritattā cāti. Katham bhante Nāgasena
ninnattā yattha cakkhuviññāṇaṁ uppajjati tattha manoviññāṇam
pi uppajjati, opammaṁ karohīti. Taṁ kim maññasi mahārāja:
deve vassante katamena udakaṁ gaccheyyāti yena bhante ninnaṁ
tena gaccheyyāti. Athāpareṇa samayena devo vasseyya, katamena
taṁ udakaṁ gaccheyyāti. Yena bhante purimaṁ udakaṁ gataṁ
taṁ pi tena gaccheyyāti. Kinnu kho mahārāja purimaṁ udakaṁ
pacchimaṁ udakam āṇāpeti: yenāhaṁ gacchāmi tvam pi tena
gacchāhīti, pacchimaṁ vā udakaṁ purimaṁ udakaṁ āṇāpeti: yena
tvaṁ gacchissasi ahaṁ pi tena gacchissāmīti. Na hi bhante anāḷapo
tesaṁ aññamaññehi, ninnattā gacchantīti.
    (b) Tatr' idaṁ sattamaṁ cittaṁ vibhattiṁ āpajjati: ye te mahā-
rāja sammāsambuddhā sabbaññuno dasabaladharā catuvesārajja-
visāradā, atthārasahi buddhadhammehi samannāgatā, anantajinā
anāvaraṇa-ñāṇā, tesaṁ taṁ cittaṁ sabbattha lahukaṁ upajjati lahu-
kaṁ pavattati, kiṁkāraṇaṁ: sabbattha parisuddhattā. Api nu kho
mahārāja nārācassa sudhotassa vimalassa nigganthissa sukhumadhā-
rassa ajimhassa avaṁkassa akuṭilassa daḷhacāpa-samārūḷhassa khoma-
sukhume vā kappāsa-sukhume vā kambalasukhume vā balavanipāti-
tassa dandhāyitattaṁ vā lagganaṁ vā hotīti.
2. (a) State the philosophical views of *two* of the following   4
Tīrthakaras:—Pūraṇo Kassapo, Makkhali Gosālo, and Nigaṇtho
Nātaputto.
    (b) How do you prove the identity of Milinda with the Graeco-   5
Bactrian king Menander ?
3. (a) Explain *two* of the following terms:—*Lakkhaṇa.pañho*,   4
Meṇḍaka-pañho, and *vetaṇḍi*.
    (b) Answer the question involved in the following :—   4
Bhante Nāgasena, nav'ime puggalā mantitaṁ guyhaṁ vivaranti
na dhārenti, katame nava ?

4. Give the substance of the following in English:— 4
Bodhisattānaṁ bhante Nāgasena parakkamo dakkhāpito, pāramī
ca Jinānaṁ bhiyyo obhāsitā, cariyaṁ carato pi tāva Tathāgatassa
sadevake loke setthabhāvo anudassito; sādhu bhante Nāgasena,
thomitaṁ Jinasāsanaṁ, jolitā Jinapāraṁī, chinnā titthiyānaṁ vāda-
ganthi, bhinnā parappavādakumbhā, pañho gambhīro uttānīkato,
gahanaṁ agahanaṁ kataṁ, sammā-laddhaṁ Jinaputtānam nibbāha-
naṁ.

5. Explain the following verse in Pāli in the manner of Bud- 7
dhaghosa:—

Pare ca na vijānanti
'mayam ettha yamāmase,'
ye ca tattha vijānanti
tato sammanti medhagā.

6. Give in English a summary of *either* Devadattassa vatthu *or* 7
Aggasāvaka-vatthu.

7. Translate the following into English:— 10
Te theraṁ khamāpetvā antogāmaṁ pāvisiṁsu. Manussā te nisī-
dāpetvā bhikkhaṁ datvā, 'kiṁ bhante ayyānaṁ gamanākāro pañ-
ñāyatīti.' 'Āma upāsakā, Satthāraṁ daṭṭhukāṁ' amhā' ti. Te
punappunaṁ yācitvā tesaṁ gamanacchandaṁ eva ñatvā anugantvā
paridevitvā nivattiṁsu. Te pi anupubbena Jetavanaṁ gantvā Sat-
thāraṁ ca mahāthere ca therassa vacanena vanditvā punadivase
yattha therassa kaniṭṭho vasati taṁ vīthiṁ piṇḍāya pāvisiṁsu.
Kuṭimbiko te sañjānitvā nisīdāpetvā, katapaṭisanthāro 'bhātika-
thero me kuhiṁ' ti pucchi. Ath' assa te taṁ pavattiṁ āroccesuṁ.
So tesaṁ pādamūle pavaṭṭento roditvā pucchi: 'idāni bhante kiṁ
kātabbam' ti.
Derive *nisīdāpetvā* and *daṭṭhukāmā*. Give the forms in *ajjatanī* 10
(aorist) and *parokkhā* (preterite) of the root of *nivattiṁsu*. Decline
the base of *bhante* in the objective and locative cases. Give the
feminine form of *pavaṭṭento*.

8. Translate the following into English:— 30
Atīte Bārāṇasiyaṁ Brahmadatte rajjaṁ kārente Bodhisatto tassa
amacco ahosi. Tadā rañño Mahilāmukho nāma maṅgalahatthi ahosi
sīlavā ācārasampanno, na kiñci vihethoti. Ath', ekadivasaṁ tassā
sālāya samīpe rattibhāga-samanantare corā āgantvā tassa avidūre
nisinnā corā mantaṁ mantayiṁsu: 'evaṁ ummaggo bhinditabbo,
evaṁ sandhicchedakammaṁ kattabbaṁ ummaggañca sandhicched
añca maggasādisaṁ titthasadisaṁ nijjataṁ niggumbaṁ katvā
bhaṇḍaṁ harituṁ vattati, harantena māretvā va haritabbam, evaṁ
uṭṭhātuṁ samattho nāma na bhavissati, corena ca nāma sīlācārayut-
tena na bhavitabbaṁ, kakkhaḷena pharusena sāhasikena bhavitab-
ban' ti evaṁ mantetvā aññamaññaṁ ugganhāpetvā agamaṁsu.
Eten'eva upāyena punadivase pīti bahudivase tattha āgantvā
mantayiṁsu. So tesaṁ vacanaṁ sutvā 'maṁ sikkhāpentīti' saññāya
'idāni mayā kakkhaḷena pharusena sāhasikena bhavitabban' ti
tathārūpo va ahosi, pāto va āgataṁ hatthigopakaṁ soṇḍāya gahetvā
bhūmiyaṁ pothetvā māresi, aparam pi tathā aparam pi tathā ti
āgatāgataṁ māreti yeva. 'Mahilāmukho ummattako jāto diṭṭhadiṭ-
the māretīti' rañño ārocayiṁsu. Rājā Bodhisattaṁ pahini: 'gaccha
paṇḍita, jānāhi kena kāraṇena so duṭṭho jāto' ti.

PALI.

THIRD HONOURS PAPER.

Examiner—Dr. Benimadhab Baruya, M.A., D.Litt.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Group. A.

Sanskrit Grammar.

1. Combine according to the rules of sandhi *any two*:—   1
    (a) *San + acyutah*, (b) *Patan + taruh*, (c) *Bhavān + lābhah*.

2. Decline *any six*:—   3
    - (*a*) *Muni* in the 7th case-ending singular.
    - (*b*) *Go* in the 2nd case-ending singular.
    - (*c*) *Go* in the 6th case-ending singular.
    - (*d*) *Dandin* in the 5th case-ending singular.
    - (*e*) *Yusmad* in the 6th case-ending singular.
    - (*f*) *Nadi* in the 1st case-ending plural.
    - (*g*) *Kumārī* in the 2nd case-ending plural.

3. Illustrate *Bahuvrihi* and *Karmadhāraya samāsas*.   2

4. Conjugate *any four*:—   4
    - (*a*) *Brū*,   *Lat*, 3rd person singular.
    - (*b*) *Sru*,   *Lat*, 3rd person dual.
    - (*c*) *Sru*,   *Lit*, 3rd person singular.
    - (*d*) *Pra + āpa*, *Lat*, 3rd person plural.
    - (*e*) *Pra + āpa*, *Lot*, 2nd person singular.

5. Correct *any five* of the errors:—   5
    So Rājagrhasmin nagaro gatvā ekam munim-apaśyat. Munisya
tassa antikam upasarpya bahūni phalo drstvā bubhukṣāpīdito san tān
yayāce.

Group B.

Pali Grammar.

6. Apply the rules of sandhi:—   1
    - (*a*) *Yathā + eva*,   1
      And *any two* of (b) *Sādhu + iti*, (c) *Me + ayam*, (d) *Etam + avoca*.

7. Decline *any three*:—   3
    - (*a*) *Rājā* in genitive singular.
    - (*b*) *Rājā* in locative singular.
    - (*c*) *Bhavam* in vocative singular.
    - (*d*) *Dhītu* in genitive plural.

8. Conjugate:—   3
    - (*a*) *Gam* in aorist 1st person singular.
    - (*b*) *Dā* in aorist 1st person singular.
    - (*c*) *As* in present tense 3rd person plural.

9. How are the causative and the infinitive formed ? Give examples. 4

10. Explain with examples:— 3

Yenāṅgavikāro. Kālabhāvesu ca.

Group C.

Attempt four questions only.

11. 'Pāli noun-declension has borrowed from the pronominal one.' 10 Illustrate the above and explain it philologically.

12. What does reduplication indicate in the Aryan languages ? 10 Give the rules of reduplicating a verbal root. What is the reduplicated form of the Sanskrit root *sthā* ?

13. Distinguish between the (i) Genealogical and the (ii) Morpho- 10 logical classifications of languages. Assign Pāli and French to their proper places according to the first system.

14. Distinguish between the Aryan and the Semitic languages in 10 structure and inflexion.

15. Trace instances in languages where the verb and the noun are 10 not distinguished.

16. Discuss the question of correspondence between language and 10 thought.

Group D.

17. Translate into Pāli :— 30

(a) Whether Buddhas arise, O priests, or whether Buddhas do not arise it remains a fact and the fixed and necessary constitution of being, that all its constituents are transitory (... that all its constituents are misery . . . and that all its elements are lacking in an ego). This fact a Buddha discovers and masters, and when he has discovered and mastered it, he announces, teaches, publishes, proclaims, discloses, minutely explains, and makes it clear.

(b) The man who lives for sensual joys,
And findeth his delight therein,
When joys of sense have taken flight,
Doth smart as if with arrows pierced.

(c) The body, loathsome and unclean,
Is carrion-like, resembles dung,
Despised by those whose eyes can see,
Though fools find in it their delight.

PALI.

Fourth Honours Paper.

Examiner—MAHAMAHOPADHYAYA DR. SATISCHANDRA VIDYA-
BHUSHAN, M.A., PH.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate *three* of the following into English:—   15

    (*a*) ' Sve saṁnipāto Ānanda, sekhena gamanaṁ tahiṁ,
    na yuttaṁ te, sadatthe tvaṁ appamatto tato bhava.'
    Iccevaṁ codito thero katvāna vīriyaṁ samaṁ
    iriyāpathato muttaṁ arahattaṁ apāpuṇi.

    (*b*) Therā pi te matipadīpahatandhakārā
    lokandhakārahananaṁhi mahāpadīpā
    nibbāpitā maraṇaghoramahānilena :
    tenāpi jīvitamadaṁ matimā jaheyyāti.

    (*c*) Hitvā sotthaṁ brahmavimānaṁ pi manuññaṁ
    jeguccham so sāsanahetu naralokaṁ
    āgammākā sāsanakiccaṁ katakicco,
    ko nām'añño sāsanakiccambi pamajje ?

    (*d*) Pahīnalābhasakkārā titthiyā lābhakāraṇā
    sayaṁ kāsāyaṁ ādāya vasiṁsu saha bhikkhuhi.
    Yathāsakaṁ ca te vādaṁ buddhavādo ti dīpayuṁ,
    yathāsakaṁ ca kiriyaṁ akariṁsu yathāruci.

    Expound the *samāsa* in *matipadīpahatandhakārā* in (*a*), and *pahī-
    nalābhasakkārā* in (*d*). Analyse the sandhi in *sadatthe* in (*a*). Explain
    the meaning of *iriyāpatha* in (*a*). Derive *settham* and *jegucchaṁ* in
    (*c*). Conjugate the root of *lābha* in the *ajjatanī* (aorist) and *parokkhā*
    (past tense) third person.

2. (*a*) Discuss the date of composition of the Mahāvaṁsa.   5
    (*b*) Describe how a schism or schisms in the Buddhist church   5
    arose in the second century of the Buddha's *nirvāṇa*.

3. (*a*) Explain *two* of the following terms :—*vibhajjavādī, Budha-   2
    sāsanadāyādo, and *chalabhiñño*.
    (*b*) Give in English the substance of the following :—   5

    Yassa cittaṁ uppajjati na nirujjhati,
    tassa cittaṁ nirujjhissati n'uppajjissati.
    Yassa vā pana cittaṁ nirujjhissa'i n'uppajjissati,
    tassa cittaṁ uppajjati na nirujjhatīti.

4. Translate the following into English :—   30

    (*a*) Nirantaraṁ'nekadijūpakūjitaṁ
    suphullapaṅkeruhagandhavāsitaṁ
    gato yasassī migadāyamuttamaṁ
    tahiṁ tapassī adha pañcavaggīyā.
    Devātidevaṁ tibhavekanāthaṁ
    lokantadassiṁ sugataṁ sugattaṁ
    kumantanaṁ te iti mantayiṁsu.

Bhutvāna oḷārika-annapānaṁ
suvaṇṇavaṇṇo paripuṇṇakāyo
etāvuso'yaṁ samano imassa
karoma nāmhe abhivādanādiṁ.

(b) Kāle nikkhamanā sādhu, nākāle sādhu nikkhamo,
akālena hi nikkhamma ekakaṁ pi bahūjano
na kiñci atthaṁ joteti dhaṁkasenā va kosiyaṁ.
Dhīro ca vidhividhānañūū paresaṁ vivarantagū
sabbāmitte vasīkatvā kosiyo va sukhī siyā.

(c) Yass'ete caturo dhammā vānarinda yathā tava
saccaṁ dhammo dhiti cāgo dittham so ativattatīti.

5. (a) Frame sandhi in *three* of the following:—   3

सखे एहि, ग्रमौ ग्रव्राः, जगत् ग्ररख्यः, and मातुः रोदनम् ॥

(b) Decline *three* of the following Sanskrit words:—सुधी in the   6
genitive case; पति in the dative case; स्री in the ablative case; धुवन्
in the locative case; and विद्वस् in the instrumental case.

(c) Conjugate in the third person *three* of the following Sanskrit   6
roots:—वद in लिट् ; इन् in लोट् ; पश in लङ ; वम in लट् ; and वद्
in लृट् ॥

6. (a) Give the causative (निजन्त) form of *two* of the following   2
Sanskrit roots:—जन्, दृश, and दा ॥

(b) Give the desiderative (सनन्त) form of *two* of the following   2
Sanskrit roots:—स्था, जि, and लभ ॥

(c) Derive *three* of the following Sanskrit words :—   3

विठ्ठः, व्राह्मख्यं, नामधेयं, मित्रघाती, and भङ्कः ॥

7. (a) Frame *two* Sanskrit sentences to illustrate the use of the   2
verb नी in लट् third person singular number in the active and passive
voices.

(b) Correct the following:—   6

सो पाठात् विरमते । विजयतु राजन् । नराण् पश्य । हवींषि
ग्राहर । नगरे ग्रधिवसति ॥

PALI.

FIFTH HONOURS PAPER.

Examiner—BABU SAILENDRANATH MITRA, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

A. TEXTS.

1. Translate into English *any two* of the following, adding notes   20
where necessary :—

(a) Kiṃ Ānanda Tathāgato bhikkhusaṃgham ārab bha kiñcid
eva udāharissati? Ahaṁ kho pan' Ānanda etarahi jiṇṇo vuddho
mahallakee addhagato vayo anuppatto, asītiko me vayo vattati
Seyyathā pi Ānanda jarasakataṁ veghamissakena yāpeti, evam eva
kho Ānanda veghamissakena maññe Tathāgatassa kāyo yāpeti.
Yasmim Ānanda samaye Tathāgato sabbanimittānam amanasikārā
ekaccānaṁvedanānaṁ nirodhā animittaṁ cetosamādhim upasam
pajja viharatī, phāsukato Ānanda tesmiṁ samayo Tathāgatassa
kāyo hoti. Tasmātih' Ānanda attadīpā viharatha attasaraṇā an-
aññasaraṇā, dhammadīpā dhammasaraṇā anaññasaraṇā.

(b) Na nu evam Ānanda mayā paṭigacc' eva akkhātaṁ, sabbeh'
eva piyehi manāpehi nānābhāvo vinābhāvo aññathābhāvo ? Taṁ
kut' ettha Ānanda labbhā ? Yaṁ taṁ jātaṁ bhūtaṁ saṅkha-
taṁ palokadhammaṁ taṁ vata mā palujjîti n'etam thānaṁ vijjati.
Yaṁ kho pan'etaṁ Ānanda Tathāgatena cattaṁ vantaṁ muttaṁ
pahīnaṁ paṭinissatthaṁ ossattho āyu-saṅkhāro. Ekaṁsena vācā
Tathāgatena bhāsitā : " Na ciraṁ Tathāgatassa parinibbānaṁ bhavis-
sati, ito tiṇṇaṁ māsānam accayena Tathāgato parinibbāyissatīti."
Taṁ vacanaṁ Tathāgato jīvita-hetu puna paccāvamissatiti, n'etam
ṭhānaṁ vijjati.

(c) Yo kho pana bhante Brahmuno pakativaṇṇo anabhisambha-
vaniyo, so devānam Tāvatiṁsānam cakkupathasmiṁ. Yadā bhante
Brahmā Sanaṁkumāro devānam Tāvatiṁsānaṁ pātu bhavati, so
aññe devo atirocati vaṇṇena c'eva yasasā ca. Seyyathā pi bhante
sovaṇṇo viggabo mānusaṁ viggahaṁ atirocati, evam eva kho
bhante yadā Brahmā Sanaṁkumāro devānam Tāvatiṁsānaṁ pātu
bhavati, so aññe deve atirocati vaṇṇena c'eva yasasā ca. Yadā
bhante Brahmā Sanaṁkumāro devānam Tāvatiṁsānaṁ pātu bha-
vati, na tassa parisāyam koci devo abhivādeti vā paccuttheti vā āsa-
nena nimanteti vā. Sabbe tuṇhībhūtā pañjalikā pallankena nisī-
danti..

2. Give *in your own Pali* an accoun⁺ of Buddha's meeting with   6
Ambapālī.   *Or,*

Give, according to the Mahāgovinda Suttanta, an account, in your
own Pali, of Nibbana and the Path.

3. Narrate the incidents connected with Buddha's visits to Pata-   5
ligāma, Kotigama and Nādikā.

4. Who are the Thūpârahās ? Why are they so called ?   .4

5. Comment on the technicalities in *any three* of the following :—   5
ṭhānāni, silavipatti, sikkhākāma-bhikkhu, arupasaññi and *dham-
manvaya.*

B. UNSEEN.

6. Translate into English :— 30

(a) Bhoto kho rañño janapado sakaṇṭāka sa-upapīḷo, gāma-ghātā pi dissanti nagara-ghātā pi dissanti pantha-duhanā pi dissanti. Bhavañ ce kho pana rājā evaṁ sakaṇṭake janapade sa-upapīḷe baliṁ uddhareyya, akicca-kārī assa tena bhavaṁ rājā. Siyā kho pana bhoto rañño evam assa : ' Aham etaṁ dassukhīlaṁ vadhena vā pabbājanāya vā samūhanissāmiti,' na kho pan etassa dassukhīlassa evaṁ sammā samugghāto hoti.

(b) Acelako hoti muttācāro haṭṭhāpalekhano, na-ehibhadantiko, na-tiṭṭha-bhadantiko, nābhihataṁ na uddissakaṭaṁ na nimantanaṁ sādiyati. So na kumbhi-mukhā paṭigaṇhāti, na kaḷopi-muk hā paṭigaṇhāti, na eḷakanantaraṁ na daṇḍamantaraṁ na musalaman-taraṁ, na dvinnaṁ bhuñjamānānaṁ, na gabbhiniyā na pāyamānāya na purisantaragatāya, na saṁkittisu, na yattha sā upaṭṭhito hoti, na yattha makkhikā saṇḍa-saṇḍa-bārinī na macchaṁ na maṁsaṁ, na sūram na merayam no thusodakaṁ pivati.

C. SANSKRIT GRAMMAR.

7. Form (a) adverbs of time, place, cause, and manner from each 8 of the following :—

किम्, इदम्, अदस्, यत्.

(b) adjectives from अदृ, चक्राकम्. 2

8. Translate into Sanskrit, using Taddhita forms or derivatives 12 (from words placed within brackets) for expressions in italics :—

(a) *The son of six mothers* (षण्मातृ) led the army of the gods and defeated the demon.

(b) *A daughter's son* (दुहितृ) can inherit a property.

(c) In such moonlight the word *becomes milky* (क्षीर).

(d) *In old age* (वृद्ध) the king entered on the ascetic state.

9. Give (a) the accusative, in all numbers, of *any two* of the 2½ following :—

सखिम्, अदस्, मघवन्

(b) the vocative singular and locative of *any two* of the fol- 1 lowing :—

राजन्, भूपति, ओषधस्

(c) the nominative dual of the present participle neuter of *any two* of the following :—

या, यौ, चाप.

(d) the nominative singular masculine of the comparative of 1½ दूर, पटु, पटिष्ठ.

(e) the third person singular Present Desiderative of या, चु, 2 यम्, जि.

PALI.

SIXTH HONOURS PAPER.

Examiner—DR. BENIMADHAB BARUYA, M.A., D.LITT.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

GROUP A.

Attempt FIVE questions only.

1. Mention the most important cities of India referred to in the   10 Buddhist canonical literature, and indicate their probable sites.

2. Review the economic condition of India in the sixth century   10 B.C., dwelling mainly upon (a) the trade-routes of the age, (b) the modes of conveyance, (c) the duties on merchandise, (d) currency, (e) the agents of production.

3. What light do the Buddhist texts throw on the popular religious   10 belief of the Indians in the sixth and seventh centuries B.C. ?

4. Give some account of the Śākyas, their mode of life, and their   10 political institutions. What led to their extermination ?

5. Who were the Wanderers (Paribbājaka) ? Mention their va-   10 rious orders.

6. What was the nature of the Dhamma preached by Asoka in his   10 edicts ?

7. Give a brief account of the reign of Kanishka and of his con-   10 nexion with the Buddhist church.

GROUP B.

Either,

8. Write a note on the origin of Pali, the local Indian dialect from   13 which it originated, and its connexion with the Vedic and the Classical Sanskrit.

Or,

Discuss briefly the various theories on the origin of language.

Either,

9. Distinguish between the stemforming suffixes and personal   12 suffixes, and illustrate them with Sanskrit and Pali.

Or,

Discuss :—' The more a sentence is broken up the clearer will its meaning be.'

10. Give an account of the polysynthetic languages, their struc-   13 ture, and geographical location.

11. Examine briefly the main theories connected with the original   13 home of the primitive Indo-Europeans.

PALI.

First Pass Paper.

Examiner—Babu Sailendranath Mitra, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. When was the Khuddakapāṭha composed? Show how it 10
forms a part of the Pāli canon.

2. How would you interpret the title ' Dhammapada ' ? Discuss 10
the date of the first arrangement of the Dhammapada.

3. Summarize in simple Pāli *either* the Sahassavagga *or* the Nidhi- 10
kaṇḍasutta.

4. Translate into English *any four* of the following, adding notes 24
on the words italicized :—

   (a) Adāsi me akāsi me ñātimittā sakhā, ca me
   petānam dakkhiṇam *dajjā* pubbe kṣtam anussaram.
   Na hi ruṇṇam vā soko vā yā c'aññā paridevanā
   na tam petānam *atthāya* evam titthanti ñātayo.

   (b) Patisambhidā vimokkho ca yā ca sāvakapāramī
   paccekabodhi buddhabhūmi sabbam etena *labbhati*
   Evam mahiddhiyā esā *yadidam* puñña-sampadā
   tasmā dhīrā pasamsanti paṇḍitā katapuññatam.

   (c) Yesam *sannicayo* n'atthi ye pariññātabhojanā
   suññato animitto ca vimokho yesam gocaro   •
   ākāse va sakuntānam gati tesam durannayā
   Uyyuñjanti satimanto na nikete ramanti te
   hamsā va pallalam hitvā okamokam jahanti te.

   (d) Sabbe tasanti *daṇḍassa* sabbe bhāyanti maccuno,
   attānam upamam katvā na haneyya na ghātaye.
   sukhakāmāni bhūtāni yo daṇḍena vihimsati
   attano sukham *esāno* pecca na labhate sukham.

   (e) Attānañ ce piyam *jañña* rakkheyyā nam surakkhitam,
   tiṇṇam aññataram yāmam patijaggeyya paṇḍito.
   Attadattham *paratthenā* bahunâpi na hāpaye,
   attadattham abhiññāya sadatthapasuto siyā.

5. Parse *anussaram* in (a) and *surakkhitam* in (e) above. 5
Derive *runnam* and *bhāyanti*. Name and expound the *samāsa* in
pariññātabhojanā and *sukhakāmāni*.
Decline the base of *maccu* in the ablative.
Conjugate the roots of *hāpayṣ* and of *jañña* in the past perfect
(Parokkhā).

6. Comment on *any three* of the following :—*Paṭisambhidhā*, *pac-* 6
cekabodhi, *pārami*, and *iddhi*.

7. Give in simple Pāli the substance of *one* of the following :— 5

   (a) Vanappagumbe yathā phussitagge
   Gimhāna' māse pathamasmi gimhe
   Tathûpamam dhammavaram adesayī
   Nibbānagāmim paramam hitāya
   Idam pi buddhe ratanam paṇītam
   Etena saccena suvatthi hotu.

(b) Santussuko ca subharo ca
　　Appakicco ca sallahukavutti
　　Santindriyo ca nipako ca
　　Appagabbho ca kulesu ananugiddho
　　Na ca khuddaṁ samācare kiñci
　　Yena viññū pare upavadeyyuṁ.

8. Translate into English :—　　　　　　　　　　　　　30

Ubho mātā ca dhītā ca mayaṁ āsum sapattiyo
tassā me ahu saṁvego abbhuto lomahaṁsano.
Dhi-r-atthu kāmā asucī duggandhā bahukaṇṭakā
Yattha mātā ca dhītā ca sabhariyā mayaṁ ahum.
Kāmesvādinavaṁ disvā nekkhammaṁ daḷhakhemato
sā pabbajiṁ Rājagahe agārāsmā anagāriyaṁ.
Pubbenivāsaṁ jānāmi dibbacakkhuṁ visodhitaṁ
ceto paricca ñāṇañ ca sotadhātu visodhitā.
Iddhi pi me sacchikatā patto me āsavakkhayo
cha me abhiññā sacchikatā kataṁ Buddhassa sāsanaṁ.
Iddhiyā abhinimmitvā caturassaṁ rathaṁ ahaṁ
Buddhassa pāde vanditvā lokanāthassa sirīmato.

PALI.

Second Pass Paper.

Examiner—Mahamahopadhyaya Dr. Satischandra Vidya-
bhushan, M.A., Ph.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate the following into English, adding notes where　　15
necessary :—

(a) Tena kho pana samayena āyasmā 'Āyupālo Saṅkheyyapari-
veṇe paṭivasati. Atha kho Milindo rājā amacce etad avoca : Ra-
maṇīyā vata bho dosinā ratti, kaṇṇu khvajja samaṇaṁ vā brāhma-
ṇaṁ vā upasaṅkameyyāma sākacchāya pañhapucchanāya, ko mayā
saddhiṁ sallapituṁ ussahati kaṅkhaṁ paṭivinetunti. Evaṁ vutte
pañcasatā yonakā rājānaṁ Milindaṁ etad avocuṁ : Atthi mahārāja
Āyupālo nāma thero tepiṭako bapussuto āgatāgamo, so etarahi Saṅ-
kheyyapariveṇe paṭivasati, gaccha tvaṁ mahārāja, āyasmantaṁ
Āyupālaṁ pañhaṁ pucchassūti. Tena hi bhaṇe bhadantassa ārоce-
thāti. Atha kho nemittiko āyasmato ˎĀyupālassa santike dūtaṁ
pāhesi : rājā bhante Milindo āyasmantaṁ Āyupālaṁ dassanakāmo ti.

(b) Yathā vā pana mahārāja ye keci siddhā saccamanugāyanti :
jalita-pajjalitamahāaggikkhandho patinivattatūti, tesaṁ saha saccaṁ
anugītena jalita-pajjalitamahāaggikkhandho khaṇena paṭinivattati,
api nu kho mahārāja atthi tasmiṁ jalita-pajjalite mahāaggikkhand-
he hetu sannicito yena hetunā jalita-pajjalitamahāaggikkhandho
khaṇena paṭinivattatī ti. Nahi bhante, saccaṁ yeva tattha vatthu
hoti tassa ˎjalita-pajjalitassa mahāaggikkhandhassa khaṇena patini-
vattanāyāti. Evameva kho mahārāja natthi tassa pakatihetu,
saccaṁ yev'ettha vatthu bhavati dibbacakkhussa uppādāyāti.

2. (a) Write all that you know about Nāgasena. 6
(b) Prove that the Milindapañha existed before the time of 5
Buddhaghosa.

3. Answer *one* of the following:— 4
(a) Rājā āha: Bhante Nāgasena, yam pan' etam brūsi: nāma-rūpanti, tattha katamam nāmam katamam rūpan ti.
(b) Rājā āha: Bhante Nāgasena, yam pan' etam brūsi: digham addhānanti, kim etam addhānam nāmāti.

4. Give the substance in English of the following: 6
Atthi me bhante Nāgasena koci attho tumhehi saddhim mantayi-tabbo, na tattha añño koci tatiyo icchitabbo, suññe okāse pavivitte araññe atthangupāgate samaṇasāruppe tattha so pañho pucchitabbo bhavissati, tattha me guyham na kātabbam na rahassakam, arahām' aham rahassakam suṇitum sumantaṇe upagate, upamāya pi so attho upaparikkhitabbo, yathā kim viya: yathā nāma bhante Nāgasena mahāpathavī nikkhepam arahati nikkhepe upagate, evam eva kho bhante Nāgasena arahām' aham rahassakam suṇitum sumantaṇe upagate ti.

5. Explain the following verse in Pāli in the manner of Bud-dhaghosa:— 7

Subhānupassim viharantam indriyesu asamvutam
bhojanamhi amattaññum kusītam hīnaviriyam,
tam ve pasahati Māro vāto rukkham va dubbalam.

6. Give in English a summary of *either* Cakkhupāla-vatthu *or* 7
Kāliyakkhinī-vatthu.

7. Translate the following into English:— 10
Ath' eko makkato tam hattim utthāya samutthāya divaso divaso Tathāgatassa ābhisamācārikam karontam disvā ' aham pi kiñcid eva karissāmīti' vicaranto ekadivasam nim-makkhikam daṇḍakamadhum disvā daṇḍakam bhañjitvā daṇḍaken'eva saddhim madhupaṭalam satthusantikam haritvā kadalipattam chinditvā tattha thapetvā adāsi; satthā gaṇhi; makkato ' karissati nu kho paribhogam na karissatīti' olokento gahetvā nisinnam disvā ' kinnu kho' ti cintetvā daṇḍakotiyam gahetvā parivattetva upadhārento aṇḍakāni disvā tāni saṇikam apanetvā adāsi.
Derive *ābhisamācārikam* and *karontam*. Conjugate the roots of 10
gaṇhi and *apanetvā* in the *vattamānū* (present tense), and *parokkhā* (preterite) third person singular number. Decline the base of *sattha* in the ablative and locative cases. Give the feminine form of *vicaranto*.

8. Translate the following extract into English:— 30
Atīte bhikkhave Bārāṇasiyam Janasandhe nāma rajjam kārente Bodhisatto tassa aggamahesiyā kucchismim nibbatti. Tassa muk-ham suparimajjitam kañcanādāsatalam viya parisuddham hosi atiso-bhaggappattam. Ten'assa nāmagahaṇadivase Ādāsamukhakumāro ti nāmam akamsu. Tam sattavassabbhantare yeva pitā tayo vede sabbañca loke kattabbam sikkhāpetvā tassa sattavassikakāle kālam akāsi. Amaccā mahantena sakkārena rañño sarīrakiccam katvā matakadānāni datvā sattame divase rājangaṇe sannipatitvā ' kum-āro atidaharo, na sakkā rajje abhisiñcitum, vīmamsitvā tam abhisiñ-cissāmā ' ti ekadivasam nagaram alamkārāpetvā vinicchayatthānam sajjetvā pallamkam paññāpetvā kumārassa santikam gantvā ' vinic-chayatthānam deva gantum vattatīti' āhamsu. Kumāro ' sādhū ' ti mahantena parivārena gantvā pallamke nisīdi. Tassa nisinnakāle amaccā ekam dvipādehi vicarana makkatam vatthuvijjācariyavesam

gāhāpetvā vinicchayaṭṭhānaṁ netva 'deva ayaṁ puriso pitu mahārājassa kāle vatthuvijjācariyo paguṇavijjo, antobhūmiyaṁ sattaratanatthāne dosaṁ passati, eten' eva gahitaṁ rājakulānaṁ gehatthānaṁ hoti, imaṁ devo saṁgaṇhitvā ṭhānantare ṭhāpetū' ti āhaṁsu.

PALI.

Third Pass Paper.

Examiner—Dr. Benimadhab Baruya, M.A., D.Litt.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A.

Sanskrit Grammar.

1. Combine according to the rules of sandhi *any two* :—
   (a) *Deva + ṛṣih*, (b) *Hari + aśvah*, (c) *Sarat + candrah*.

2. Decline *ony four* :—
   (a) *Deva* in the 3rd case-ending plural.
   (b) *Deva* in the 5th case-ending plural.
   (c) *Sādhu* in the 1st case-ending plural.
   (d) *Pitṛ* in the 6th case-ending plural.
   (e) *Asmad* in the 6th case-ending singular.

3. Give the superlative forms of *any two* of *Vṛddha, Praśasya,* and *Alpa*.

4. Give the forms fot *any five* of the following :—
   (a) *Bhū + liṭ* 3rd person singular.
   (b) *Bhā + laṅ* 3rd person dual.
   (c) *Sthā + laṭ* 3rd person singular.
   (d) *Dā + laṭ* 3rd person plural.
   (e) *Sthā + liṭ* 3rd person singular.
   (f) *As + laṭ* 3rd person plural.

5. Correct *any five* of the errors in the following :—
   So tasya sakhāmm-āha, 'sakhā tisrah nadiyo atikramya ahaṁ Vaiśālīsya antikaṁ gatavān. Tatra saivāsānām-upāsikānāṁ puratah dvau bhikṣu dharmopadeśaṁ kurvanti' ti.

Group B.

Pāli Grammar.

6. Join according to the rules of sandhi *any four* :—
   (a) *Cattāro + ime*, (b) *Yasmā + iha*, (c) *Mahā + isi*, (d) *Mukha + udakaṁ*, (e) *Nīla uppalaṁ*.

7. Decline *any four* :— 4
  (a) *Citta* in the 1st case-ending plural.
  (b) *Citta* in the 2nd case-ending plural.
  (c) *Muni* in the 6th case-ending singular.
  (d) *Hari* in the 7th case-ending singular.
  (e) *Brahma* in the 6th case-ending singular.

8. Conjugate :— 3
  (a) *Dā* in the present tense 1st person singular.
  (b) *Kar* in the aorist tense 1st person singular.
  (c) *Su* in the optative tense 1st person singular.

9. Illustrate the formation of the desiderative and of the present 3
participle.

10. Explain and illustrate :— 3
Kāladdhānaṁ yoge ca. Maññatippayoge anādare appāṇini.

GROUP C.

Attempt FOUR *questions only.*

11. Show with apt examples from Sanskritic languages that ' Lan- 1
guage is in a constant state of change.'

12. Classify the Pāli sounds according to their kind and place of 10
articulation.

13. Explain *assimilation*, and illustrate it with *five* examples. 10

14. What is meant by the ' law of compensation ' ? Give ex- 10
amples.

15. How are languages classified morphologically ? Describe *any* 10
two of those classes.

16. Give instances from Aryan languages of nouns (or of adjec- 10
tives) governing nouns in the objective case.

GROUP D.

30

17. Translate into Pāli :—
Standing respectfully at one side, Mahā-Pajāpati the Gotamid
spoke to the Blessed One as follows : ' Pray, Reverend Sir, let women
retire from household life to the houseless one, under the doctrine
and discipline announced by the Tathāgata.' ' Enough, O Gotamid,
do not ask that.' Then she was sorrowful, sad, and tearful, and
wept. And saluting the Blessed One, and keeping her right side
towards him, she departed . The Blessed One departed on his
wanderings, came to where Vesāli was, and dwelt in Great Wood, in
Pagoda hall.

Now the venerable Ānanda saw Mahā-Pajāpati with her hair cut
off, with swollen feet, and with a number of Sakka women, stand
weeping outside in the entrance porch.

ALTERNATIVE GROUP A.

For Burman students only.

18. Apply the rules of sandhi :—(a) *Putha + eva*, (b) *Puṁ + lingaṁ*. 1
19. Decline *either* Sakhā *or* Go. 4
20. Give the superlative forms of *any two* ;—*Vuddho, Bālho Yuvā*. 2
21. Conjugate the root *as* in the present tense. 2
22. Illustrate the uses of *Kālātipatti* and *Pañcamī* (of verbs). 3
23. Explain with examples :— 3
    Visesane ca. Anādare ca.

ARABIC.

Paper-setters—
(Pass and
Honours)
{
SHAMS-UL-ULAMA ABU NASR MUHAMMAD
    WAHEED, M.A.
ABDUL AZIZ.
MAULVI ABU TAHIR.

FIRST HONOURS PAPER.

*Examiner—*MAULVI MD. ABU TAHIR.

Candidates are required to give their answers in their own words
as far as practicable.

The figures in the margin indicate full marks.

1. (a) Translate into English :—   25

(١)   احـــاد ام سداس فـــّي احـــاد

ليبلتنا المـــنــــوطة بالتــنـــاد

كان بنات نعـــش في دجـــاها

خـــرائد سافـــرات في حـــداد

افكـــر في مـــعاقرة المـــنايا

وقود الخيل مشرفة الهوادي

زعيما للقفـــا الخطـــى عزمي

بسفك دم الحواضر و البوادي

الى كم ذا التخلف و التواني

و كم هذا التمادي فى التمادي

و شغل النفس عن طلب المعالي

ببيع الشعـــر في سوق الكســـاد

و ما ماضى الشبـــاب بمستــرد

و لا يوم يمـــر بمستــعـــاد

متى لحظت بياض الشيب عينى

فقد وجدته منها فى السـواد

(ب) هينون لينون ايسـار ذور كـرم

سواس مكرمة ابنـاء ايسـار

ان يسألوا الحق يعطوه و ان خبروا

فى الجهد ادرك منهم طيب اخبار

و ان تودّدتهم لانوا و ان شهمـوا

كشفـت اذمار شر غير اشرار

فيهم و منهم يعد المجـد متلدا

و لا يعـد نثـا خـزى و لا عار

لا يذطقون عن الفحشاء ان نطقوا

و لا يمـارون ان مـاروا باكثـار

من تلق منهم تقل لاقيت سيدهم

مثل النجوم التى يسرى بها السارى

(b) Write notes on the underlined words of the above extracts. 7

(c) Give the etymology of بنات نعش* and give another Arabic 5
name of the same constellation.

(d) Account for ال in the word السواد in the last line of the 3
extract (١)

2. Explain fully the following verses :— 15

و كم من عبرة اصبحـت فيهـا

يليـن لها الحـديد و انت قلس

باى قوى تظنـك ليس تبلى

و قد بليت على الزمن الرواسى

و ما كل الظنـــون تكـــون حقا

و لا كل الصواب على القـــياس

و كل مخيلة رفعـــت لعيـــن

لهـــا وجهـــان من طمع و ياس

و في حسن الســـريرة كل انس

و في خبث السريرة كل باس

و لم يك منيه حسدا و بغيـــا

لينجـــو منهمـــا راسا براس

و ما شئ باخلـــق ان يـــراه

قليلا من اخي ثقـــة مواس

و ما تنفـــك من دول تراها

تنقـــل من اناس فى اناس

3.   Give a short account of *Mutanabbi's* life, commenting on his   15 poetry—comparing it with ancient Bedouin poetry. (Answer in Arabic).

4.   Re-write the following lines, giving vowel-signs :—   10

و كم اثكل الدهر من والده	لكم فجع الدهر من والد
ينـــأ على قدم واحده	و كم ترك الدهر من سيد
تفرع فى اسرة ماجـــده	و كم قد راينا فتى ماجدا
و يطعـــم فى ليلة البادره	يشمص فى الحرب بالدارعين
فاصبـــح فى التلة الهامده	رماه الزمان بسهم الردى

5.   Explain the following lines in Arabic :—   20

(a) و فاؤكما كالربع اشجاه طاسمـــه

بان تسعدا و الدمع اشفاه ساجمه

و ما انا الا عاشق كل عاشــــق

اعق خليليه الصفييــــن لائمه

و قد يتـــزيا بالهـــوى غير اهله

و يستصحب الانسان من لا يلائمه

بليت بلى الاطلال ان لم اقف بها

وقوف شحيح ضاع فى الترب خاتمه

كئيبا توقانى العواذل فى الهوى

كما يتوقى ريض الخيل حازمه

(b) اذا كان مدح فالنسيب المقدم

اكل فصيــــح قال شعــرا متيم

لحـــــب ابن عبد الله اولى فانه

به يبدأ الذكر الجميل و يختم

اطعت الغوانى قبل مطمح ناظرى

‍الى منظر يصغرن عنه و يعظـــم

‍تعـــرض سيف الدولة الدهر كله

يطبـــق فى اوصاله و يصمـــم

فجاز له حتى على الشمس حكمه

و بان له حتى على البدر ميسم

ARABIC.

Second Honours Paper.

Examiner—A. F. Harley, Esq., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English :— 16

حكى الحارث بن همام قال كلفت مذ ميطت عنى التمائم -
و نيطت بى العمائم - بان اغشى معان الادب - و انضي اليه
ركاب الطلب - لاعلق منه بما يكون بى زينة بين الانام -
و مزنة عند الوام - و كنت لفرط اللهج باقتباسه - و الطمع فى
تقمص لباسه - اباحث كل من جل و قل - و استسقى الوبل
و الطل و اتعلل بعسى و لعل - فلما حللت حلوان - و قد بلوت
الاخوان و سبرت الاوزان و خبرت ما شان وزان - انفيت بها
ابا زيد السروجى يتقلب فى قواليب الانتساب - و يتخبط
فى اساليب الاكتساب - فيدعى تارة انه من آل ساسان -
و يعتزى مرة الى اقيال غسان - و يبرز طورا فى شعار الشعراء -
و يلبس حينا كبر الكبراء - بيد انه مع تلون حاله - و تبيين محاله -
يتحلى بزواء و رواية - و مداراة و دراية - و بلاغة رائعة - و بديهة
مطاوعة - و آداب بارعة - و قدم لاعلام العلوم فارعة - فكان لمحاسن
آلاته - يلبس على علاته - و لسعة روايته - يصبى الى رويته -
و لخلابة عارضته - يرغب عن معارضته و لعذوبة ايرادة - يسعف
بمرادة - فتعلقت باهدابه - لخصائص آدابه - و نافست فى
مصافاته - لنفائس مفاته *

2. (a) Turn the above extract into your own simple Arabic.   12

   (b) Write historical notes on ساسان and غسان.   8

   (c) Give the geographical position of حلوان.   2

   (d) Point out the peculiarities of باب in the following words:—   2

<div dir="rtl">

تقمص اقتباس - استسقى - تحلى - معارضة *

</div>

   (e) Derive the following :—

<div dir="rtl">

رواء - رواية - مداراة - دراية *

</div>

3. Translate *one* of the following into English :—   10

A.

<div dir="rtl">

قال ابو جعمر و انا ذاكر فى كتابى هذا من ملوك كل زمان
من ابتداء ربنا جلى جلاله خلق خلقه الى حال قيامهم من
انتهى الينا خبره ممن ابتدأه الله تعالى بآلائه و نعمه - فشكر
نعمه من رسول له مرسل او ملك مسلط او خليفة مستخلف
فزاده الى ما ابتدأه به من نعمه فى العاجل نعما و الى ما
تفضل به عليه فضلا - و من اخّر ذلك له منهم - و جعله له
عنده ذخرا و من كفر منهم نعمه فسلبه ما ابتدأه به من نعمه
و عجل له نقمه - و من كفر منهم نعمه فمتعه بما انعم به عليه
الى حين وفاته و هلاكه - مقرونا ذكر كل من انا ذاكره منهم
فى كتابى هذا بذكر نعمائه *

</div>

B.

<div dir="rtl">

قال ابو الريحان الخوارزمي اذا فرضنا ان دائرة معدل النهار
تقطع كرة الارض بنصفين يسمى احد النصفين جنوبا و الاخر
شمالا - و اذا فرضنا دائرة تعبر على قطبى معدل النهار و تقطع
الارض صار كرة الارض اربعة ارباع - ربعان جنوبيان و ربعان
شماليان - فالربع الشمالى المكشوف يسمى ربعا مسكونا - و الربع

</div>

المسكون مشتمل على البحار و الجزائر و الانهار و الجبال
و المغاوز و البلدان و القرى على ان ما بقى منها تحت
قطب الشمال قطعة غير مسكونة من افراط البرد و تراكم الثلوج -
و هذا الربع المسكون قسموها سبعة اقسام - كل قسم يسمى اقليما ٭

4.   13

(قال له صاحبه و هو يحاوره) يجاوبه (اكفرت بالذي خلقك
من تراب) لان آدم خلق منه (ثم من نطفة) منى (ثم
سواك) عدلك و صيرك (رجلا ۞) ٭

What story is connected with this?   Answer in Arabic.

5.   Relate the story of ياجوج و ماجوج and Alexander as given in   10
the Quran.

6.   Explain *any three* of the following :—   12

(a)   الحمد لله الذي انزل على عبده الكتاب و لم يجعل له
عوجا ۞ قيما لينذر باسا شديدا من لدنه ٭

(b)   و انا لجاعلون ما عليها صعيدا جرزا ٭

(c)   و ربطنا على قلوبهم اذ قاموا فقالوا ربنا رب السموات
و الارض لن ندعو من دونه الها لقد قلنا اذا شططا ٭

(d)   قال الذين غلبوا على امرهم لنتخذن عليهم مسجدا -
سيقولون ثلثة رابعهم كلبهم و يقولون خمسة سادسهم كلبهم رجما
بالغيب و يقولون سبعة و ثامنهم كلبهم ٭

(e)   و يقولون يا ويلتنا مال هذا الكتاب لا يغادر صغيرة و لا كبيرة ٭

7   Give the substance of the following in your own Arabic :—   13

أصحا ام قد نهـــى ذكرة   ام قضى٠ من لذة و طربه
ام تذكرت الشباب و ما   ذكرك الشباب او عصره

مثلهــا اتى الفتى غيره   انهــا حـــرب رباعيــة

اذ اتـت غدوا مع الزهره   فســلا عمــران او اسدا

سبــغ ابدانهــا ذفــره   فيلـــق فيهــا ابو كـــرب

ابنى عوف ام النجــره   ثم قالــوا من يؤم بهــا

فيهــم تتلــى و ان تره   بل بنى النجـــار ان لذا

مدهــا كالغيبــة الفتره   فتلقتهــم مســائــفــة

الالــه قـــومه عمــره   فيهم عمرو بن طلــة ملا

رام عمـــراً لا يكن قدره   سيدا سامى الملوك و من

ARABIC.

THIRD HONOURS PAPER.

Examiner—SHAMS-UL-ULAMA ABU NASR MUHAMMAD WAHEED, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *any one* of the following :—

A.

قال ابراهيم النخعى اذا دخل احدكم بيتا فليجلس حيث   24
اجلسه اهله۔ قال سعيد بن العاص ما مددت رجلى قط بين يدي
جليسى و لا قمت حتى يقوم و قال ايضا لجليسى على ثلاث
اذا دنا رحبت به و اذا جلس وسعت له و اذا حدث اقبلت
عليه ۔ و قال زياد اياك و صدور المجالس و ان صدرك صاحبها
فانها مجلس۔قلعة ۔ و لان ادعى من بعد الى قرب احب
الى من ان اقصى من قرب الى بعد ۔ قال ابن المعتز

لا تسرع الى ارفع موضع فى المجلس فالموضع الذي تحط
اليه خير من الموضع الذي تحط منه *

قالت الحكماء رأس الادب كله حسن الفهم و التفهم
و الاصغاء للمتكلم قال بعض الحكماء لابنه يا بنى تعلم حسن
الاستماع كما تتعلم حسن الحديث و ليعلم الناس انك
احرص الناس على ان تسمع منك على ان تقول فاحذ
ان تسرع فى القول فيما يجب عنه الرجوع بالفعل - من
حسن الادب ان لا تغالب احدا على كلامه و اذا سئل غيرك
فلا تجب عنه و اذا حدث بحديث فلا تنازعه اياه و لا تقتحم
عليه فيه و لا تره انك تعلمه *

بعث ملك الى عبد له : ما لك لا تخدمنى و انت
عبدى - فاجابه لو اعتبرت لعلمت انك عبد عبدى لانك
تتبع الهوى فانت تتبعه و انا املكه فهو عبدى *

B.

و قال القاضى ابو بكر بن العربى المالكى الامام العلامة
ليس لله تعالى خلق احسن من الانسان فان الله تعالى خلقه
حيا عالما قادرا متكلما سميعا بصيرا مدبرا حكيما - قال تعالى لقد
خلقنا الانسان فى احسن تقويم و هو اعتداله و تسوية اعضائه
لانه خلق كل شئ منكبا على وجهه و خلقه سويا - و له لسان
ذلق ينطق به و يد و اصابع يقبض بها - مؤدبا بالامر مهذبا بالتمييز -
يتناول مأكوله و مشروبه - و افتتح ابن بختنيشوع الطبيب
النصرانى كتابه فى الحيوان بالانسان و قال انه اعدل الحيوان

مزاجا و اكمله افعالا و الطفه حسا و انفذه رأيا - فهو كالملك المسلط القاهر لسائر الخليقة و الأمر لها - و ذلك بما وهب الله تعالى له من العقل الذى به يميز على كل الحيوان البهيمى فهو بالحقيقة ملك العالم - و لذلك سماه قوم من الاقدمين العالم الاصغر *

العقرب اخبث الحشرات تلدغ كل شى حتى الحجر و المدر و قيل فى ذلك *

رأيت على صخــــبرة عقربا * و قد جعلـــت ضـــربها ديدنا
فقلت لها انهـــا صغـــرة * و طبعك من طبعهـــا الينا
فقالت صدقت و لكنني * اريـــد اعرفـــهـــا مـــن انا

2. Translate into English *any two* of the following :—

A.

23

يتحول الماء بقوة الحرارة الى بخار ثم الى ضباب - و اذا دامت الحرارة تحول الضباب الى بخار غير منظور - فالبخار اذا غير منظور و مرن - فاذا راقبنا ابريق ماء يغلى رأينا البخار خارجا من منفذه و علة خروجه تمدد الماء بالحرارة حين استحالته الى بخار فيشغل فراغا اعظم مما يشغله الماء - و كلما طالت مدة الحرارة ازداد تمدد البخار * و قد دلت الامتحانات العلمية على ان الماء المتحول بخارا بالحرارة تحت ضغط هواء عادى يتمدد ١٧٢٨ مرة زيادة عن حجمه الاصلى - فالقيراط المكعب يتمدد فى حاله البخارية حتى يشغل مساحة قدرها قدم مكعبة - مثال ذلك انا اذا وضعنا على النار و عاء ماء مغطى

21

سمعنا حين سخونته ازيزا و جيشانا ورأينا على سطحه فقاقيع
ثم يأخذ الغطاء يهتز و يرتج كان فى الوعاء شيأ يدفعه الى فوق -
و ما ذلك الا لان الاناء امتلأ بخارا فاخذ يرفع الغطاء و يطلب
الفرار *

B.

الاعصار هو زوبعة تجعل الماء عمودا قاعدته متصلة بالبحر
و رأسه متصل بالغيم - و سببه حدوث الزوبعة فوق البحر - فعند
ما تمس الريح اللولبية سطح الماء ترفع كثيرا من الزبد عن وجهه
الى مركزها فتدور و تجذب الماء بما فيه فيصعد عمودا فيتطاول
بسرعة و قد يهتز الى الامام والخلف ثم يلتف و يعلو الى ان
يمس السحاب فينتصب عمودا بينه و بين الماء * و الاعاصير
تحدث غالبا فى زمن الحر و قد يتدلى اثنان او ثلاثة منها
من سحابة واحدة و قد شوهد سبعة منها فى نصف ساعة -
و اعلم ان الاعصار باتصاله بالماء من اسفله قد يلف و يحمل
فى جوفه اخشابا و اسماكا و ضفادع و حيوانات بحرية متنوعة *

C.

و يشترط للنجاح ان يكون للمرء غرض خاص من اغراض
الحياة يجعله ابدا نصب العين سواء كان ذلك صناعة او تجارة
او علما - اذ من الواضح ان القوة اذا تفرقت ضعفت و اذا
جمعت قويت - فلابد من الدرس الواسع و تحصيل المعارف
العامة لان هذا يهذب العقول و يزيدها قوة فى مباشرة الاعمال -
و لكن لابد من صرف القوى الى غرض واحد يختاره المرء
غير ان هذا الاختيار لا يكون دائما فى قوة الانسان بل كثيرا

ما يندفع اليه اضطرارا - و لكن عليه ان يتقى مهنته مهما كانت

و مهما عارضه الدهر - و من اقوال الحكماء لا تدخلن امرا

لا تكون ماهرا فيه و قولهم لا تطلب سرعة العمل و اطلب

تجويده - ثم اذا اختار امرء صناعة و جعلها غرض الحياة و تعلمها

حق العلم فعليه ان يلازمها بلا انقطاع لانه اذا قعد عنها او بدلها

بغيرها كانت النتيجة غالبا خيبة الامل *

و قل من جد فى امر يحاوله * و استعمل الرفق الا فاز بالظفر

3. Translate into Arabic, giving vowel-signs:—

A.

'Behold me,' said he, 'behold me charged with the cares of Government.   18
I am not the best among you; I need all your advice, and
all your help. If I do well, support me; if I mistake, counsel me.
To tell the truth to a person commissioned to rule is faithful allegi-
ance; to conceal it is treason. In my sight the powerful and the
weak are alike; and to both I wish to render justice. As I obey God
and the Prophet, obey me. If I neglect the laws of God and the Pro-
phet, I have no more right to your obedience.'

B.

He and his sons tilled the ground, or wove cloth to make clothes.   12
The little boys tended the cattle, and the women milked the cows
or spun thread, or did other work at home. In time of war the men
took up their swords, bows and arrows, and went out to fight. They
prayed to the gods to help them in the fight, and thanked the gods
for their aid when the fight was over.

ARABIC.

Fourth Honours Paper.

Examiner—Maulavi Md. Abu Tahir.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English, adding explanatory notes where neces-   20
sary :—

    (a)   ابرق بـدا مـن جانب الغـور لامع

ام ارتفعـت عن وجه سلمـى البراقع

انار الغضا ضاءت و سلمـى بذي الغضا

ام   عمـا حكتـه المدامع

·٢٠   نح ام عرف حاجر

بام القـرى ام عـطـر عـزة ضائع

الا ليـت شعـري هل سليمـى مقيمة

بوادي الحمـى حيث المتيـم والع

و هل لعلـع الرعد المنـون بلعلع

و هل جادها صـوب من المـزن هامع

و هـل اردن مـاء العـذيب و حاجر

جهـارا و سر الليـل بالصبـح شائع

و هل قاعة الوعسـاء مخضـرة الربى

و هل ما مضى فيه من العيـش راجع

و هل بربى نجـد فتـوضـح مسند

اهيـل النقـا عمـا حوته الأضالع

لـعـل اصيحـابي بمكـة يبردوا

بذكر سليمـى ما تـبـجـس الأضالع

(b) قفا نبــك من ذكرى حبيـــب و منزل

بسقـــط اللـــوى بيـــن الدخول فحومل

فـــتوضح فالمقـــراة لـم يعــف رسمهـــا

لمـا نسجتهـا من جنـــوب و شمــال

تــرى بعـــر الارام فى عـــرصاتهـــا

و قيعــانهـا كانـه حـــب فلــفـل

كانى غـــداة البـيـــن يـــوم تحمـلـوا

لدى سمـــرات الحـــي ناقـف حنظـل

وقـــوفا بـهـــا صحبى على مطيهـــم

يـــقــولون لا تهلـك اسى و تجمـل

و ان شـــفـــائى عـبـــرة مـــهـــراقة

فهـل عنـد رســم دارس من معـــول

كدابـــلك مـــن ام الحـــويرث قبلهـــا

و جارتــهـــا ام الـــربـاب بـــمـاسل

اذا قامتـــا تضــوع المسـلك منهمـا

يــم صـبـــا جاءت برى القرنفـل

دموع العـــيـــن منـــى صبابة

على النحـــر حتى بل دمعى محمـل

2. Name the poets of both the preceding extracts, and give a short   10
account of the poet of the last extract. (Answer in English).

3. Narrate the story of (دارة جلجل) in English.   5

4. Explain only the allusions in the following lines:—   10

كانت مواعيـــد عرقوب لها مثـــلا

و ما مواعيـــدها الا الاباطيـــل

ان الرســــول لغـــور يستـــــاغاء به

من سيـــوف الله مسلــول

فى عصبـــة من قريش قال قائلهـــم

ببطـــن مكـــة لمـــا اسلمـــوا زولوا

شم العرانيـــن ابـــطـــال ببوسهـــم

من نســـج داؤد فى الهيجـــا سرابيل

5. Explain fully the following lines:—   17

(a) عفـــت الديار محلهـــا و مقامهـــا

بمــنــى تابــد غولهــا فرجامهــا

فمـــدافع الريـــان عـــرى رسمهــا

خلقــا كمــا ضمن الوحى سلامهـــا

دمن تجـــرم بعـــد عهد انيسهـــا

حجـــج خلون حلالهــا و حرامهــا

رزقت مرابيــع النجـــ م وصابهـــا

ودق الرواعـد جودهـا فهامـــها

من كـــل سارية وغـــاد مدجـــن

وعشيـــة متجـــاوب ارزامـــهـــا

(b) فقـــد اتيـــت رسول الله معتـــذرا

و العـــذر عنـــد رسول الله مقبــول

مهلا هداك الذى اعطاك نافلة الـ

ـقران فيهـــا مواعيـــظ و تفصيـــل

لا تاخذنى باقوال الوشـاة ولـم

اذنب و ان كثــرت فى الاقاويل

لقـــد اقوم مقـــاما لو يقـــوم به

ارى و اسمـــع ما قد اسمـــع الفيل

6. Write the context of the verses given below in Arabic prose:— 18

و قالـوا شربت الاثم كلا و انـمـــا

شربت التى فى تركها عندى الاثم

هنيئاً لاهل الدير كم سكـــروا بها

و ما شربوا :مَنهـا و لكنهـــم همـــوا

و عندى منهـا نشوة قبـل نشاتى

معى ابدا تبقــى و ان بلى العظـم

عليك بها صِرفا و ان شئت مزجها

فعد لك عن ظلم الحبيب هو الظلم

و فى سكرة منهـــا و لو عمـــر ساعة

ترى •الدهر عبدا طائعا ولك الحكم

فلا عيش فى الدنيا لمن عاش صاحيا

و من لم يمت سكرا بها فاته الحزم

على نفسه فليبك من ضاع عمره

و ليس له فيمـــا فيهـ•ـب نصيـب ولا سهـــم

7. Translate into Arabic :— 20

After the conquest of Greece, the Romans put no bounds to their
ambition. They became desirous of conquering the whole world, and
turning their arms against every nation within their reach, subdued a
great part of Europe, and at length invaded Asia. Here they were
opposed by Mithridates, King of Pontus. He was a man of great
abilities, and defeated the Romans in several engagements. The
Greeks hated their Roman oppressors, and were induced to take part

with Mithridates. But he was at length defeated by a famous general, named Sylla, and the poor Greeks, now left to his mercy, were treated with the most cruel severity. Athens and Boeotia, in particular, excited his anger, and were, therefore, covered with desolation by the conqueror. Scarcely were these calamities over when this devoted country became the prey of some corsairs, or sea robbers, from Sicily. These pirates were very formidable, having no less than one thousand ships, and being in possession, at one time, of four hundred towns along the borders of the Mediterranean.

ARABIC.

FIFTH HONOURS PAPER.

Examiner—A. F. HARLEY, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *either* A *or* B :—   8

A.

روى انه عليه الصلاة و السلام لما دعا بهذه الدعوات قيل له
عند كل كلمة فعلت و عنه عليه السلام انزل لله تعالى آيتين
من كنوز الجنة كتبهما الرحمن بيده قبل ان يخلق الخلق
بالفى سنة من قرأهما بعد العشاء الاخيرة اجزأتاه عن قيام
الليل و عنه عليه الصلاة و السلام من قرأ الآيتين من اخر سورة
البقرة فى ليلة كفتاه وهو يرد قول من استكره ان يقال سورة البقرة
و قال ينبغى ان يقال السورة التى تذكر فيها البقرة كما قال
عليه الصلاة و السلام السورة التى تذكر فيها البقرة فسطاط القران
فتعلموها فان تعلمها بركة و تركها حسرة و لن يسطيعها البطلة قيل يا
رسول الله و ما البطلة قال السحرة •

B.

و لقوله عليه الصلاة و السلام انا ابن الذبيحين فاحدهما جده
اسمعيل و الاخر ابوه عبد الله فان جده عبد المطلب نذر ان يذبح
ولدا ان سهل الله له حفر زمزم و بلغ بنوه عشرة فلما سهل اقرع
فخرج السهم على عبد الله فغداه بماية من الابل و لذلك سنت
الدية مائة و لان ذلك كان بمكة و كان قرنا الكبش معلقين بالكعبة
حتى احترقا معها فى ايام ابن الزبير و لم يكن اسحق ثمة و لان
البشارة باسحق كانت مقرونة بولادة يعقوب منه فلا يناسبها الامر
بذبحه مراهقا و ما روى انه عليه الصلاة و السلام سئل اى
النسب اشرف فقال يوسف صديق الله ابن يعقوب اسرائيل الله
ابن اسحق ذبيح الله ابن ابراهيم خليل الله فالصحيح انه قال
يوسف بن يعقوب بن اسحق ابن ابراهيم و الزوائد من الراوي *

2. (a) Quote from your memory the prayer referred to بهذه الدعوات   4
in the extract A, Question 1.

(b) Write a short note on زمزم.   5

(c) Give the exact meaning of the word اسرائيل الله.   3

3. (i) Explain after *Al-Baidawi* either (a) or (b) :—   10

(a) و الصّافات صفا فالزاجرات زجراً فالتاليات ذكرا *

(b) رب السموات و الارض و ما بينهما و رب المشارق *

(ii) Explain one of the following after *Al-Kashshaf* :—   5

(a) الكتاب الحكيم هدى ورحمة للمحسنين *

(b) و اتبع سبيل من اناب الى *

(iii) Give a brief account of لقمان as described by *Zamakhshari.*   10

4. (a) Expand the following :—   5

و عن النبى صلى الله عليه و سلم مفاتح الغيب خمس
و تلا هذه الاية (و عنده علم الساعة الخ) و عن ابن عباس

رضى الله عنهما من ادعى علم هذه الخمسة فقد كذب اياكم
و الكهانة *

(b) Describe علامات النبوة.   8

5.   Translate into English *either* A *or* B :—   10

A.

و اما الذى للانبياء فهو استعداد بالانسلاخ من البشرية الى
الملكية المحضة التى هى اعلى الروحانيات ويخرج هذا
الاستعداد فيهم متكررا فى حالات الوحى و هو عند ما يعرج
على المدارك البدئية و يقع فيها ما يقع من الادراك شبيها
بحال النوم شبها بيذا و ان كان حالہ النوم ادون منه بكثير فلاجل
هذا الشبہ عبر الشارع عن الرؤيا بانها جزء من ستة و اربعين جزء
امن النبوة و فى رواية ثلاثة و اربعين و فى رواية سبعين و ليس
العدد فى جميعها مقصودا بالذات و انما المراد الكثرة فى
تفاوت هذه المراتب بدليل ذكر السبعين فى بعض طرقه
و هو للتكثير عند العرب و ما ذهب اليه بعضهم فى رواية
ستة و اربعين من ان الوحى كان فى مبتدئه بالرويا ستة اشهر
و هى نصف سنة و مدةُ النبوة كلها بمكة و المدينة ثلاث و عشرون
سنة فنصف السنة منها جزء من ستة و اربعين فكلام بعيد من
التحقيق *

B.

قال ابن اسحق و كان تبع و قومه اصحاب اوثان يعبدونها
فتوجه الى مكة و هى طريقه الى اليمن حتى اذا كان بين
عسفان وامج اتاه نفر من هذيل ابن مدركة بن الياس بن مضر
بن نزار بن معد فقالوا له ايها الملك الا ندلك على بيت مال

دائر اغفله الملوك قبلك فيه اللؤلؤ و الزبرجد و الياقوت

و الذهب و الفضة قال بلى قالوا بيت بمكة يعبده اهله

و يصلون عنده و انما اراد الهذيليون هلاكه بذلك لما عرفوا من

هلاك من ارادة من الملوك و بغى عنده فلما اجمع لما قالوا

ارسل الى الحبرين فسألهما عن ذلك فقال له ما اراد القوم الا

هلاكك و هلاك جندك ما نعلم بيتا لله اتخذه فى الارض

لنفسه غيره و لئن فعلت ما دعوك اليه لتهلكن و ليهلكن من

معك جميعا قال فماذا تامرانى ان اصنع اذا قدمت عليه قالا

تصنع عنده ما يصنع.أهله *

6. Define ترشيع - تجريد - استعارة - مرسل - مجاز - حقيقة. 12

7. Translate into Arabic :— 20

Habit is called a second nature, and indeed it is so. When once we contract a habit it is almost impossible to give it up, and we regard it as a part of our nature. Therefore we should be very careful in forming a habit ; unless we are very careful a habit quietly and gradually takes possession of us, and we cannot easily get rid of it.

ARABIC.

SIXTH HONOURS PAPER.

Examiner—SHAMS-UL-ULÁMA ABU NASR MD WAHEED, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks

1. Answer *any three* of the following :— 30
   (a) Give an account of the early Arab conquest of Egypt.
   (b) Give an account of the revolt of the Kharijis and the Berbers.
   (c) Give the causes of the downfall of the Omayyad Dynasty.
   (d) Describe the Battle of Medina Sidonia and its immediate effect.
   (e) Describe briefly the character of Harun-ur-Rashid and his glorious reign.
   (f) Describe the intellectual developments of the Arabs under Mamun.
   (g) Give a description of Cordova under the Arabs.

2. Answer *any four* of the following :—   40

    (*a*) Give a brief sketch of the life and work of—

                (i) 'Antarah ;

                (ii) Nabighah.

    (*b*) Give a brief account of Pre-Islamic poetry and religion.

    (*c*) Give the causes which led to corruptions in the tradition of the old poetry.

    (*d*) Give a brief history of Arabic writing.

    (*e*) Describe briefly the intellectual developments of the Arabs in Spain.

    (*f*) Give the characteristics of the Omayyad literature.

    (*g*) Write notes on —

                (i) Abu Nuwas ;

                (ii) Jarir ;

                (iii) Ibn Siná ;

                (iv) Al-Ghazáli ;

                (v) Ibn Rushd.

3.   A.

Answer *any two* of the following :—   14

    (*a*) Define زحاف ـ وتد و سبب ـ ركن ـ اصول ـ بحر and give examples.

    (*b*) Enumerate the various kinds of زحاف permissible in more than one ركن.

    (*c*) Give examples of كشف ـ خرم ـ جب ـ ثلم.

    (*d*) Quote from memory some lines of Arabic poetry written in طويل بحر. ـ بحر كامل and بحر رمل , and scan them according to the standard measures of فعل.

Answer *any two* of the following :—   16

    (*a*) Distinguish between (i) الاستعارة و المجاز, (ii) الحقيقة والمجاز, (iii) and المجاز المركب و المجاز الـفرد. المرسل.

    (*b*) Give illustrations of the following :—

(١) تسمية الشىء باسم جزئه و عكسه *

(٢) تسمية الشىء باسم سببه او مسببه *

(٣) تسمية الشىء بما كان عليه *

(٤) تسمية الشىء بما يؤل اليه *

(٥) تسمية الشىء باسم حاله *

(c) Name the kind of استعارة or مجاز used in each of the follow-ing :—

(١) فبشرهم بعذاب اليم *

(٢) فان تعافوا العدل و الايمانا * فان فى ايمانفـا نيـرانا

(٣) اخذنا باطراف الاحاديث بيننا

و سالت باعناق المطى الاباطح

(٤) لدى اسد شاكى السلاح *

(٥) و يصعد حتى يظن الجهول

بان له حـــاجـــة فى السمـــاء

ARABIC.

First Pass Paper.

Examiner—Maulavi Md. Abu Tahir.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English :— 25

(a) كانفـــي في ديار قد خربـــت

وبالدمو ع ا؟

فضحت لا بل جرحت و ا.

دنيــا رجالا عليـــك. قد كلبـــت

الـــمــوت حق و الدار فانـــية

و كل نفس تجــزي بما كسـت

يا لك من جيـــفة معفنـة

اى امتنـاع لهــا اذا طلبـــت

(b) انســاك محيـاك المماتـا

فطلبـــت فى الدنيـا الثبـاتا

اوثقـــت فى الدنـيـا و انت

تـرى جمـاعتهـا شتـاتا

و عزمت منـك على الحيـاة

و طـولـهـا عـزمـا بتـاتا

يا من ارى ابويـه فيـمـن

قـد راى كانـا فمـاتـا

هل فيهـمـا لك عبـرة

ام خلـت ان لك انفـلاتا

(c) الا رب ذي اجـل قد حـضـر

كثيـر التمنى قليـل العـذر

اذا هز فى المشـي اعطـافه

تعـرفت من منكبيـه البطـر

يؤمـل اكـثـر من عـمـره

و يزداد يومـا بيـوم اشـر

و يمسى و يصبـح فى نفـسـه

كريم المسـاعى عظيـم الخطـر

(d) الآهى لا تـعذبنى فانـي

مـقـر بالذي قد كان منـى

و ما لى حيـلـة الا رجائي

و عفوك ان عفـوت وحسن ظنى

فكــم من زلة لى فى الـبـرايـا

و انت علــى ذو فضـــل و مـن

اذا فكـــرت فى قدمـى عليهـا

عضضت اناملى و قرعت سنـى

(e) خير من الساعات فى * فئ القصور العاليه

تعقبهـــا عقـــوبــة * تصلــى بنار حامية

فهـــذه وعيتـــى * مخبــره بحاليــه

طوبى لمن يسمعهـــا * تلك لعمرى كافيـه

فاسمع لنصح مشفق * يدعى ابا العتاهيـه

(f) من الجـــآذر فى زى الاعاريب

حمر الحلى و المطايا و الجلابيب

ان كنت تسأل شكا فى معـارفها

فمن بلاك بتسهيـــد و تعذيب

متجزنى بضفى بى بعدها بقر

تجزى دموءى مسكوبا بمسكوب

سوائر ربمـــا سارت هوادجهـــا

منيعة بين مطعون و مضـــروب

(g) يا ابنـــة عبـــد الله و ابنـــة مالـــك

و يا ابنة نى البردين و الفرس الورد

اذا ما صنعت الزاد فالتمسى له

اكيلا فانى لست اكله وحـــدى

اخا طارق او جار بيـــت فاننــى

اخاف مذمات الاحاديث من بعدى

و انى لعبد الضيـــف ما دام ثاويا

و ما فى الا تلك من شيمـــة العبد

(h) يا ام كدراء مـــهـــلا لا تلـــومينــى

انى كـــريم و ان اللـــوم يوذينـــى

فان بخلــــت فان البخل مشترك

و ان اجد اعـــط عفوا غيـــر ممنــون

ليســـت بباكية ابلى اذا فقـــدت

صوتى و لا وارثى فى الحى يبكينى

بنـــى البنـــات لذا مجدا و مكرمة

لا كالبنـــاء من الاجـــر و الطيـــن

2.   Explain the following lines in Arabic :—   15

اين ازمعت ايهذا الهمـــام   *   نحن نبت الربى و انت الغمام

نحن من ضايق الزمار له فيـــــك و خانته قربك الايام

فى سبيل العلى تتالك و السلـــــم و هذا المقـــام و الاجذاء

ليت انا اذا ارتحلت لك الخيـــــل و انا اذا نزلت خيام

كل يوم لك ارتحال جديد   *   و مسيـــر للمجد فيه مقـــام

3.   Re-write the above extract (Question 2) giving vowel-signs.   10

4.   Scan the line quoted below and name the metre :—   5

حياتك انفـــاس تعـــد فكلما

مضى نفس منها نقصت بها جزاء

5. Explain in English, with historical allusion:— 15

عذابا كلمـا كثــرت لديه   ارى الدنيا لمن هى فى يديه

و تكرم كل من هانت عليه   تـفني المكرمين لها بصــغر

و خذ ما انت محتاج اليه   اذا استغنيت عن شئى فدعه

6. Give the singular or the plural, as the case may be, of the 10
following words:—

سن ـ مطايا ـ برايا ـ حياض ـ بزاة ـ حوراء ـ همام ـ ربى ـ ديار ـ ميرة
فار ـ شهمة ـ جار ـ طارق ـ برد.

7. Give the تعليل of طاب ـ لوزد ـ هائل ـ اختبرت ـ ارى ـ سارت ـ 10
اصابة ـ ق ـ دع ـ كانت ـ يُدءى.

8. Analyse:— 10

هزمت مكارمه المكارم كلهــا

حتـى كان المكــرمات قبائل

طول التعاشر بين النـاس مملول

ما لابن ادم ان فتشت معقـــول

للمرء الوان دنيــا رغبة و هوى

و عقله ابدا ما عاش مدخـــول

ARABIC.

SECOND PASS PAPER.

Examiner—A. F. HARLEY, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. (a) Explain fully with allusions:— 16

فلما لم يسعف بالاقالة و لا اعفي عن المقالة ـ لبيت دعوته
تلبية المطيع و بذلت فى مطاوعته جهد المستطيع و انشأت

على ما اعانيه من قريحة جامدة و فطنة خامدة وروية ناضبه

و هموم ناصبة خمسين مقامة تحتوى على جد القول و هزلة

و رقيق اللفظ و جزله و غرر البيان و درره و ملح الادب و نوادره

الى ما وشحتها به من الايات و محاسن الكنايات و رصعته

فيها من الامثال العربية و اللطائف الادبية و الاحاجى النحوية

و الفتاوى اللغوية و الرسائل المبتكرة و الخطب المحبرة

و المواعظ المبكية و الاضاحيك الملهية مما امليت جميعه على

لسان ابى زيد السروجى و اسندت روايته الى الحارث بن همام

البصري و ما قصدت بالاحماض فيه الا تنشيط قارئيه و تكثير

سواد طالبيه و لم اودعه من الاشعار الاجنبية الا بيتين فذين

اسست عليهما بنية المقامة الحلوانية و اخرين توءمين ضمنتهما

خواتم المقامة الكرجية و ما عدا ذلك فخاطرى ابو عذره

و مقتضب حلوه و مره و هذا مع اعترافى بان البديع

رحمه الله سباق غايات و صاحب آيات و ان المتصدي بعده

لانشاء مقامة و لو اوتى بلاغة قدامة لا يغترف الا من فضالته و لا

يسري ذلك المسرى الا بدلالته ــ و لله در القائل   * بيت *

فلو قبـــل مبـــكاها بكيـــت صبـــابة

بسعدى شفيت النفس قبل التندم

و لكن بكت قبلى فهيـــج لي البكا

بكاها فقلــــت الفضــــل للمتقــــدم

(b) Turn the couplet

و لكن بكت قبلى الخ

into prose order.

(c) Give the singulars of the following words :—   2

درر - احاجى - محاسن - مواعظ - اضاحيك - غرر

(d) Comment upon لله در القائل   3

2. Translate *any one* of the following :—   12

A.

اذ لم نقصد بكتابنا هذا قصد الاحتجاج لذلك بل لما ذكرنا

من تاريخ الملوك الماضين و جمل من اخبارهم و ازمان الرسل

و الانبياء و مقادير اعمارهم و ايام الخلفاء السالفين و بعض سيرهم

و مبالغ و لياتهم و الكائن الذى كان من الاحداث فى اعصارهم -

ثم انا متبع اخر ذلك كله (انشاء الله و ايد منه بعون و قوة)

ذكر صحابة نبينا محمد صلعم و اسمائهم و كناهم و مبالغ انسابهم

و مبالغ اعمارهم و وقت وفاة كل انسان منهم و الموضع الدى

كانت به وفاته ثم متبعهم ذكر من كان بعدهم من التابعين ثم

باحسان على نحو ما شرطنا من ذكرهم ثم ملحق بهم ذكر من

كان بعدهم من الخلف لهم كذلك و زائد فى امورهم الابانة

عمن حمدت منهم روايته و نقلت اخباره و من رفضت

منهم روايته و نبذت اخباره و من وهن منهم نقله و ضعف

خبره و السبب الذى من اجله نبذ من نبذ منهم خبره و العلة

التى من اجلها وهن من وهن نقله و الى الله عز وجل

انا راغب فى العون على ما اقصده و انويه و التوفيق لما التمسه

و ابغيه فانه ولى الحول و القوة و صلى الله على محمد نبيه

و اله و سلم تسليما *

B.

و للبخار عمل يذكر فى الاسفار البرية - فيحمل الانسان على   23

جثته بسرعة و راحة يعجب منهما - و قد احيى البخار مدنا

و امصارا - و حاك للبشر المنسوجات - و وقّر البضائع فهبطت
أثمانها - و نقلها برا و بحرا باجرة رخيصة - و وصل بعض البلاد
ببعضها - و اراح الناس من اتعاب لا حد لها و لا نهاية - و وزّع
فى الوقت نفسه الاشغال و الاعمال على جموع رجماهير
تعد بالملايين - تلك قوة لا يعتريها الكلال فتدوم فى العمل ليلا
و نهارا اذا غذيت بالوقيد - و تقوم بواجباتها قياما دقيقا - و قد
باتت الألة البخارية مسعفة الانسان و معينته - و فضلا عن
ذلك لا تنفك تعلمه دروسا فى الصناعة و العلم و المواظبة -
فلا بدع اذا قلنا ان البخار رقى بالعالم المتمدن الى ذروة المجد
و الفضل *

<div align="center">C.</div>

السمك من خلق الماء و هو انواع كثيرة و منه كبار و ما لا   23
يدركه الطرف لصغره - و كله ياوى الماء و يستنشقه كما يستنشق
بنو أدم و حيوان البر الهواء - الا ان حيوان البر يستنشق الهواء
بالانف و يصل بذلك الى قصبة الرئة و السمك يستنشق
باصداغه فيقوم له الماء فى تولد الروح الحيوانى فى قلبه مقام
الهواء - و انما استغنى عن الهواء فى اقامة الحيوة و لم نستغن
نحن و ما اشبهنا من الحيوان عنه لانه من عالم الماء و نحن
من عالم الارض - و صغار السمك تحترس من كباره و لذلك
تطلب ماء الشطوط و الماء القليل الذى لا يحمل الكبير - و هو
شديد الحركة لان قوته المحركة للارادة تجرى فى مسلك واحد
لا ينقسم فى عضو خاص - و هذا بعينه موجود فى الحيات -
و من اصنافه ما هو على شكل الحيات وغير ذلك *

3. Translate into Arabic:—

A.

One day a tiger was walking near a well. His feet slipped and he 18
fell into the well. He tried very hard but could not get out. A
merchant came to the well and wanted to draw water. The tiger
saw him and said, 'Please help me to get out.' 'How can I help
you?' asked the merchant. 'Let down your rope and I will catch
it and you can pull me up.' So the tiger came out of the well and
wanted to eat him up. 'What!' said the merchant 'I saved your
life, and now you want to eat me up!'

B.

He was not a learned man himself. For many years he could
neither read nor write, for his cruel uncle had not taught him. But
he was very fond of books. He had a large library with more than five
thousand books in it. He was very fond of painting and had a great
many pictures He loved to hear good music and poetry.

ARABIC.

Third Pass Paper.

Examiner—Shams-ul-Ulma Abu Nasr Md. Waheed, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English *either* of the following:—

A.

سقط كسرى على بزرجمهر فحبسه فى بيت مظلم و امر ان   24

يصفد بالحديد - فبقى اياما على تلك الحالة فأرسل اليه

من يسأله عن حاله - فاذا هو مشروح الصدر مطمئن النفس

فقالوا له انت فى هذه الحالة من الضيق و نراك ناعم البال -

فقال اصطنعت ستة اخلاط و عجنتها و استعملتها فهى التى

ابقتنى على ما٠ترون - قالوا صف لنا هذه الاخلاط لعلنا ننتفع

بها عند البلوى - فقال نعم - اما الخلط الاول فالثقة بالله عز وجل -

و اما الثانى فكل ما شاءه الله كائن - اما الثالث فالصبر خير
ما استعمله الممتحن - و اما الرابع فاذا لم اصبر فما ذا اصنع
و لا اعين نفسى بالجزع - و اما الخامس فقد يكون اشد مما
انا فيه - و اما السادس فمن ساعة الى ساعة فرج - فبلغ ما قاله
كسرى - فاطلقه و اعزه *

من كلام الحكماء لا تكن ممن يرى القذى فى عين اخيه
و لا يرى الجذع المعترض فى حدق نفسه *

<div align="center">B.</div>

قيل انكسرت سفينة فغرق ملاحوها الا واحدا دفعته الامواج   24
الى الساحل فسار الى داخل مغارة و جلس فيها قلقا و اذا
باسد قد دخل عليه فاعترى الرجل الخوف الشديد و لا سيما
عند ما اخذ الاسد يمسه بيده كانه يذببه الى شىء فنظر و اذا به
قد رفع يده متألما فامسكها و اذا بها شوكة فنزعها فحفظ له الاسد
هذا الصنيع و صار يجىء اليه بالطعام الى ان قدر الله رجوع
الرجل الى وطنه - و بعد عشر سنوات حكم عليه بمبارزة الوحوش
لتهمة وقعت عليه و كانوا يعتقدون انه اذا نجا من مبارزة السبع
كان بريئًا - فلما صار الرجل فى ساحة المبارزة و الناس حوله
ينتظرون ما سيحل به من الويل اطلق الاسد من قفصه فاتى
اليه مبصبصا بذنبه و اخذ يلاعبه و يشمه و لم يؤذه - فتفرسه فاذا
هو الاسد الذى نزع الشوكة من كفه *

قالت الحكماء يدرك بالرفق ما لا يدرك بالعنف الا قرى
ان الماء على لينه يقطع الحجر على شدته *

2. Translate into English *any two* of the following:—

A.

23 قد نرى البعض يتنازعون و يحتالون على كسب المال لانفاقه
فى طعامهم و كسوتهم - فكسرة و بصلة باستراح خير من دجاجة
محشوة بصياح - و من الناس من يستدين المال و يستعير
الامتعة من صديق او جار - فذلك مكروه - و قد قيل الحمق
بالفاس و لا منّ الناس - و النظر فى العواقب دليل الفطنة -
فان افهم الناس من نظر فى العواقب - و اذا وقع خلاف بين
اثنين فليبادرا الى كشف الصدور و العتاب صابون القلب -
و مسالة الجميع واجبة لا سيما الاقرباء لان الف عدو خارج الدار
و لا عدو داخلها - و الحذر كل الحذر من الغضب فان اوله
جنون و اخره ندامة - و الزم الاحسان الى قريبك و لكن فليكن
عطاؤك مع البشاشة لانها عطية ثانية - و اصبر فى كل نائبة لان
الصبر مقرون بالفرج و اذكر الله فى جميع احوالك الى القلوب
تطمئن بذكره *

B.

اما المعادن فالذهب لا يتكون الا فى البرارى الرملة
و الجبال الرخوة - و الفضة و النحاس و الرصاص و الحديد
لا يتكون الا فى الاحجار المختلطة بالتراب اللين و الكبريت
لا يتكون الا فى الاراضى النارية - و الزيبق لا يتكون
الا فى الاراضى المائية و الاملاح لا تنعقد الا فى الاراضى
السبخة و الشبوب و الزاجات لا تتكون الا فى التراب
العفص - و القار و النفط لا يتكون الا فى الاراضى الدهنة -
اما تولد الاحجار التى لها خواص فلا يعلم معادنها و سببها

الا الله تعالى - و اما النبات فان النخل و الموز لا
ينبتان الا بالبلاد الحارة و كذلك الاترج و النارنج و الرمان
و الليمون واما الجوز و اللوز و الفستق لا ينبت الا بالبلاد
الباردة و القصب على شطوط الانهار و كذا الدلب و المغيلان
بالاراضى الصلبة و البرارى القفار و القرنفل لا ينبت الا بجزيرة
ارض الهند و النارجيل و الفلفل و الزنجبيل لا ينبت الا بالهند
و كذلك الساج و الابنوس و الورس لا ينبت الا باليمن
و الزعفران بارض الجبال بروزراورد و قصب الذريرة بارض نهاوند
و الترنجبيين يقع على شوك بخراسان *

3. Explain clearly (you must not try more than *three* of the follow- 20
ing):—

(a) ام حسبت ان اصحاب الكهف و الرقيم كانوا من اياتنا
عجبا *

(b) ترى الشمس اذا طلعت تزاور عن كهفهم ذات اليمين
و اذا غربت تقرضهم ذات الشمال و هم فى فجوة منه ذلك
من آيات الله *

(c) قل انما انا بشر ،مثلكم يوحى الى انما الهكم اله واحد
فمن كان يرجو لقاء ربه فليعمل عملا صالحاً و لا يشرك بعبادة ربه
احدا *

(d)   تبا له من ' خـــادع ممـــاذق
اصفـر ذى وجهين كالمنافـق
يبدو بوصفين لعيـن الرامـق
زينة معشـوق و لون عاشـق

و حبه عنـــد ذوى الحقــائق

يدعو الى ارتكاب سخط الخالق

لولاه لم تقطـــع يميـــن سارق

و لا بدت مظلمـــة من فاســـق

و اها لمـــن يقـــذفه من حالق

و من اذا ناجاه نجوى الوامق

قال له قول المحـــق الصـــادق

لا رای فی وصلك لی ففــارق

4. Describe جابرسا or ارم ذات العماد.   18

5. Expand the following :—   10

* انا جعلنا ما على الارض زينة لها لنبلوهم ايم احسن عملا *

* و لبثوا فى كهفهم ثلاثمائة سنين و ازدادوا تسعا *

6. State the حدوث الاوقات و الازمان و الليل و النهار as described in   15
your text.

PERSIAN.

FIRST HONOURS PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English and explain :—

(a) صبحدم چون کله بندد آه دود آسای من   12

چون شفق در خون نشیند چشم شب پیمای من

مجلس غم ساخت ست و من چوبید سوخته

تا بمـــن راوق كند مژگان می پالای من

رنگ بازیچه است كار كنبـــد نارنج رنگ

چند جوشم كز برونم نگذرد صفـــرای من

تیرباران سحر دارم سپر چـــون نفگنـــد

این كهن گرگ خشن بارانی از غوغای من

این خماهن گون كه چون ریم اهن پالود وسوخت

شد سكاهن پوشـــش از دود دل دروای من

روی خاک آلود من چون كاه بر دیوار حبس

از رخم كه گل كند اشک زمین اندای من

مار دیدی در گیا پیچیـــان كنـــون در غار غم

مار بین پیچیـــده در ساق گیا آســـای من

اژدها بین حلقه گشتـــه خفته زیر دامنـــم

زان نجنبـــم ترسم اگه گردد اژدرهای من

(b) Annotate, and explain the simile in the fifth and sixth verses. 10

2. Explain in Persian :—

(a)   مكــن بر نعمــت حق ناسپـــاسی   15

كه تو حق را بنـــور حق شفـــاسی

جز او معروف و عارف نیست دریاب

و لیكــی خاک می یابد ز خور تاب

عجـــب نبـــود كه دارد ذره امیـــد

هوای تاب مهـــر و نور خورشیـــد

بیـــاد آور مقـــام حال فطـــرت

كز انجا باز دانی اصل فـــطـــرت

الست بربكم ايزد چـــرا گفت

كه بود آخر كه آن ساعت بلىٰ گفت

در آن روزى كه گلها مى سرشتند

بدل در قبضـــهٔ ايمـــان نوشتند

اگـــر آن نامه را يـــكـــره نخوانى

هر آن چيزى كه ميخواهى بدانى

تو بستى عقد عهـــد بنـــدگى دوش

ولى كـــردى به نادانى فرامـــوش

كلام حـــقّ بدان گشتست نزل

كه تا يادت دهـــد آن عهـــد ادل

اگـــر تو ديـــدهٔ ق را بـــآغـــاز

در اينجـــا هم توانـــى ديدنش بر

بفـــاتش را ببيـــن امـــروز اينجا

كه تا ذاتش تـــوانى ديد فـــردا

(b) Give in Persian the substance of the تمثيل employed to illus- 6
trate the above.

3. Explain the following :— 8

انچه من بينـــم به بيدارى نه بيند كس به خواب

زا كه در يك حـــال هم در راحتم هم در عـــزاب

گاه گريم چـــون صراحى گاه خندـــدم چون قدح

گاه بالم چـــون صنـــوبر گاه نالم چون رباب

بربحـــال. من يكے بنگـــربچشـــم اعتبـــار

تا شـــوى اگه كه ضد از ضد ندارد اجتنـــاب

گـــریم و در گریهٔ من ضدهـــا بینـــی نهان

خندم و برخفـــدهٔ من گریها یا بی حجــاب

زان همی گریم که جــان از کام دل شد نا امید

زان همی خندم که دل بر کام دل شد کامیـــاب

موکب عبـــاس شاهی شد بری از خـــاوران

شد محمـــد شه مهین فرزند او نایب مناب

این سریر مجـــد و شوکت را همـــایون یار شد

این سپهر قدر و مکنـــت را فروزان ماهتـــاب

مرمرا از طلعـــت این ماه سهر دل خرمی

مرمرا از هجـــرت ان شاه در جان پیچ و تاب

4. Annotate :—

(a)   تعالی الله چه دولت دارم امشب   ۸

که آمد ناگهـــان دلدارم امشب

چو دیدم روی خوبش سجـــده کردم

بحمـــد الله نکـــو کردارم امشب

نهـــال عیشـــم از وصلـــش براورد

ز بخت خویشٔ برخوردارم امشب

کشد نقش انا الحـــق بر زمین خون

چو منصـــور ار کشی بردارم امشب

برات لیلـــة القدری بـــدستـــم

رسیـــد از طالع بیدارم امشب

بران عزمم که گر خود میـــرود سر

که سرپوش از طبـــق بردارم امشب

تو صاحب نعمتــــى من مستحقــــم

زكات حســــن ده حقــــدارم امشب

همـــــى ترسم كه حافظ محـــــو گردد

ازين شورى كه در سر دارم امشب

(b) Explain the allusions in the fourth and fifth verses.　8

5. (a) State the بحر and scan the first verse of each of the above
poetical extracts.　8

(b) Illustrate with special reference to extract 1 (a) the difference between قافیه and ردیف.　5

6. (a) Write in Persian a short life of خاقانى.　10

(b) خاقانى and قآنى are both Qasida-writers. Compare and
state the distinctive features of the writings of each.　10

PERSIAN.

Second Honours Paper.

Examiner—MAULAVI MD. IRFAN, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Render the following extracts into Persian :—　9

اَلْهٰـكُمُ التَّكَاثُرُ حَتّٰى زُرْتُمُ الْمَقَابِرَ كَلَّا سَوْفَ تَعْلَمُونَ ثُمَّ كَلَّا

سَوْفَ تَعْلَمُونَ كَلَّا لَوْ تَعْلَمُونَ عِلْمَ الْيَقِينِ لَتَرَوُنَّ الْجَحِيمَ ثُمَّ لَتَرَوُنَّهَا

عَيْنَ الْيَقِينِ ثُمَّ لَتُسْئَلُنَّ يَوْمَئِذٍ عَنِ النَّعِيمِ - وَيْلٌ لِكُلِّ هُمَـزَةٍ

لُمَزَةٍ الَّذِى جَمَعَ مَالاً وَ عَدَّدَهُ يَحْسَبُ اَنَّ مَالَهُ اَخْلَدَهُ كَلَّا

لَيُنْبَذَنَّ فِى الْحُطَمَةِ وَ مَا اَدْرَاكَ مَا الْحُطَمَةُ نَارُ اللهِ الْمُوقَدَةُ

الَّتِى تَطَّلِعُ عَلَى الْاَفْئِدَةِ اِنَّهَا عَلَيْهِمْ مُؤْصَدَةٌ فِى عَمَدٍ مُمَدَّدَةٍ *

2. State the circumstances under which the above Surahs were   10
revealed. Answer in Persian.

3. (a) What parts of speech are كَلَّا ـ يُوۡمَئِذٍ and وَيۡلٌ ؟   6

(b) Note on علم اليقين and عين اليقين.   9

(c) Give the root and formation of مَا اَدۡرَاكَ and اَخۡلَدَهٗ ـ لَتَرَوُنَّهَا.   3

4. Paraphrase in Persian :—   8

فعند ذلك، امر الشئخ غلمانه باحضار القاضى و الشهود ـ
فاحضروا هم ـ و زوجتى ابنته ـ و عمل وليمة عظيمة و فرحا
كبيرا ـ و ادخلنى عليها ـ فرأيتها فى غاية الحسن و الجمال
بقد و اعتدال ـ و عليها شئى كثير من انواع الحلى و الحلل
و المعادن و المصاغ و العقود و الجواهر الثمينة التى قيمتها الوف
الالوف من الذهب و لا يقدر احد على ثمنها *

5. (a) Derive the word الشهود, and give its root meaning.   2

(b) What is the different between الجمال and الحسن ؟   2

(c) What part of speech is المصاغ ؟   2

6. Translate any one of the following extracts into English :—   8

A.

آگاه دلان ديده‌ور و دوربينان ژرف نگاه را چرا گويم ـ ظاهر
پرستان معامله فهم نيكو مى شناسند ـ كه هرگاه منتسبان اين
دولت ابد قرين را به لحض انتساب چه گشايشها كه كشايندهٔ
مشكلات در پيش همت طلبگار ايشان نمى آرد (خصوصا بآن
ارتباط عقيدت مندى پيرايهٔ سعادت ايشان شود) خاصه آن گروه
بختت مند (كه به مراتب اخلاص اين خديو آفاق سربلند
باشند) چگونه در مطالب والا و مقاصد بزرگ كام روا
مى گردند ـ پس در هر كارى (كه اين بزرگ ساختهٔ آلهى به

نفس نفیس همت بندد) هر آینه حصول آن مقاصد بی نقاب

توقف جلوهٔ ظهور دهد - و روزی چند (که صورت تاخیر و تسویف

راه می یابد) همانا حکمت بالغهٔ ایزدی چنان اقتضا می کند :

که کتابهٔ مدارج اخلاص مخلصان و مراتب خدمت گذاری

هر کدام بر پیش طاق عیان نگارش یابد - و زنگ زدای جواهر

استعدادات شده سبب تربیت خدیو جهان مردم را بر عالمیان

پدید آید *

B.

هنگامیکه مخبر صادق صبح بفحوای وَ الصُّبْحِ اذَا تَنَفَّسَ

عالمیان را از قدرت کاملهٔ حضرت آفریدگار تعالی شانه خبر داد .

و جمازه سوار سریع السیر گردون بمودای اللّٰهُ نُورُ السَّمٰوٰاتِ وَالْاَرْضِ

در اظهار احوال جهانیان به تقریر واضح لب کشاد - خبر رسید که

جمعی از متحصنان شقاوت آثار چون دانههای انار از برج

حصار بیرون آمده - کار به خون ریزی می رسانند - و به تدارک

سرخ روئی درودادن جان شیرین قدم ثبات افشرده - مستحفظان

دمدمه را به مقتضای فَدَمْدَمَ عَلَیْهِم رَبُّهُم بِذَنْبِهِم فَسَوّٰها شربت

مرگ می چشانند *

10 - بخت مذد - ابد قرین Comment on the compounds (a) .7
- پیش طاق - کفّالهٔ مدارج اخلاص - نقاب توقف - نفس نفیس - خدیو آفاق
.شربت مرگ and قدم ثبات - جان شیرین

4 همانا and هر آینه - پیرایه - خصوصاً What parts of speech are (b)

6 مثقال - توقّتی - تواصوا - المُورِیٰاتِ of باب and مادّه - صیغه Give (c)
.سارعوا and قَسَتْ

(d) Parse the verse فَدَمْدَمَ عَلَیْهِم رَبُّهُم بِذَنْبِهِم فَسَوّٰها 5

(e) What kind of واو is in وَ الصُّبْحِ اِذَا تَنَفَّسَ ؟   3

(f) Give the صِيغَةُ اَمر of كاشتن - كاستن - خاستن - خواستن . ساختن and آختن   6

8. Give, in Persian, a brief account of—   10

وقایع ایام محاصرهٔ قلعهٔ حیدرآباد مسمی به گلکنده تاریخ چهاردهم شهر رجب سنه ۳۵ جلوس شاه اورنگ زیب عالمگیر.

PERSIAN.

THIRD HONOURS PAPER.

Examiner—MAULAVI MD. ABU TAHIR.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English:—

A.

باتفاق شوهرم ته شمع جسته و روشن کرده بسردابه که از آنجا   10 نالهای حزین پیوسته بگوش ما میخورد رفتیم من بر خود حتم کرده بودم که هرگاه فرصتی دست دهد بانجا رفته اگر از آن بیچارگان کسی را حشاشهٔ باقی باشد پرستاری کنم خلاصه وارد زمین شدیم پای ما برطوبتی لزج برخورد و من لغزیده نزدیک بود بزمین بیفتم دست خود را بدیوار گرفتم بر دیوار هم احساس رطوبت غلیظی کردم دست نزدیک چراغ آورده دیدم خون است ملتفت شدم که رطوبت زمین هم از خون مقتولین است در یک گوشه سردابه یک خرمنی از کله و بدن و جوارح مقطوعهٔ انسان یافتم که هنوز کلیةً ابدان سرد

نشده و خون از اعضای بریده جاری بود و قلبشان می طپید
و ناله ضعیفی از انها بگوش ما میرسید ما انها را که حشاشه
داشتند و در حال جان کندن بودند از مرده ها سوا کرده در
زمین همواری خوابانیدیم که اقلاً در نفس آخر در رنج و تعب
نبوده براحت بمیرند *

B.

12   یکی از ابواب گنج خانهٔ اخلاق حمیده که ارباب تمیز را
تحصیل افتتاح او بمفتاح اهتمام ضرور و لازمست خوردن است
که باید بنحوی از (وه بفعل آید که پسندیدهٔ طبایع خردمندان
افتاده غذائیکه از خوان عذایت ایزد ذو الافضال تناول مینمایند
گوارا شده از حلاوت لذات ثمرات موابد و نعمتهای سفرهٔ جود
ایزد واجب الوجود بهره مند و کامیاب گردند زیرا که اگر کسی
ذایقهٔ استدراک حلاوت لقمهٔ از موابد عقل و شعور نموده باشد
خواهد که از شربت گوارای پیروی احکام ربّانی و قواعد سفن
رسالت پناهی کامیاب گردد می تواند شد که باندک
ایستادهگی خاتم این درجات عالیه را بانگشت احوال خود
موافق ساخته در سلک ارباب سعادت انتظام یابد از جمله
سنتهای مؤکده که تیرهگی خاطرها بنور مشاعل فیوضات بر
افروزند یکی آن است که چون بر کنار سفره و خوانی نشیند
اول باید که دست بشویند و دست را بدستمال خشک نکنند
و بگفتن بسم الله الرحمن الرحیم که کلید خزانه ادراک جمیع
برکات و فیوضات است مبادرت کرده شروع در خوردن نمایند *

23

2. Translate *any one* of the following extracts into English :—   28

<p align="center">A.</p>

جهان بر آب نهـــاد است و زندگی برباد

غلام همـــــت آنم که دل بـــرو ننهـــاد

جهـــان نمـــاند و خـــرّم روان آدمیی

که باز مـــاند ازو در جهـــان بنیکـــی یاد

سرای دولت باقی نعیـــم آخـــر تست

زمین سخت نگه کن چو می نهی بنیاد

کدام عیـــش دریں بوستـــان‌’که باد اجل

همـــی بر آورد از بیـــخ قامت شمشـــاد

حیات عاریتی خانه ایسـست در ره سیـــل

چراغ عمـــر نهـــاد است بر دریچـــهٔ باد

بســـی بر آید و بیمـــا فرو شود خورشیـــد

بهـــارگاه خـــزان باشد و گهـــی مردان

بر آنچه میگـــذرد دل منه که دجلهٔ بسی

پس از خلیفه بخواهد گذشت در بغـــداد

گرت زدست بر آید چو نخـــل باش کریم

ورت ز دست نخیـــزد چو ســـرو باش آزاد

بســـی بدیدهٔ حســـرت ز پس نگاه کنـــد

کسی که برگ قیـــامت ز پیش نفرستاد

. وجـــود خلـــق بدل میکنند ورنه زمیـــن

همـــان ولایت کیخسرو است و ملک قباد

B.

کجا همــــی رود آن شاهد شکـــر گفتـــار

چرا همی نکنــــد بر دو چشـــم من رفتـــار

بآفتــاب نمــــاند مگــر بیک معنــــی

که در تامّل او خیـــره میشــــود ابصـــار

نظـــر در آئیـــنـــهٔ روی عـــالم افروزش

مثـــال صیقـــل از آئینـــه میبــــرد زنگار

برات خوبی و منشـــور لطف و زیبـــائی

نبشته بر گل وریش بخـــط. سبــــز غبـــار

'بش ندانم و خدش چگـــونه وصف کنـــم

که این چو دانهٔ ناراست و آن چو شعلـــهٔ نار

چو در محـــــاوره آید زبان شیـــرینـــش

کجــــا شدند تمـــاشا کنــــان شیـــرین کار

نسیـــم صبـــح بر اندام نازکش نگـــذشت

چو بازگشت به بستان بریخـت برگ بهـــار

منــــابع توام ایدوست گر نداری نفـــگ

مطـــاوع توام ای یار گــــر نداری عـــار

تو در کمند من آئی کدام دولت و بخـــت

من از تو روی به پیچـــم کدام صبـــر و قرار

حدیث عشق تو با کس نمیتوانم گفـــت

که غیـــرتم نگذارد که بشنـــــو اغـــیار

3. Translate into Persian:—   50

Clive returned to Madras victorious, but in a state of health which
rendered it impossible for him to remain there long. He married at
this time a young lady of the name of Maskelyne, sister of the eminent

mathematician, who long held the post of Astronomer Royal. Almost immediately after the marriage Clive embarked with his bride for England. He returned a very different person from the poor slighted boy who had been sent ten years before to seek his fortune. He was only twenty-seven, yet his country already respected him as one of her first soldiers. There was then general peace in Europe. The Carnatic was the only part of the world where the English and French were in arms against each other. The vast schemes of Dupleix had excited no small uneasiness in the city of London; and the rapid turn of fortune, which was chiefly owing to the courage and talents of Clive, had been hailed with great delight. The young captain was known at the India House by the honourable nickname of General Clive, and was toasted by that appellation at the feasts of the Directors. On his arrival in England he found himself an object of general interest and admiration. The East India Company thanked him for his services in the warmest terms, and bestowed on him a sword set with diamonds. With rare delicacy, he refused to receive this token of gratitude, unless a similar compliment were paid to his friend and commander Lawrence.

It may easily be supposed that Clive was most cordially welcomed home by his family, who were delighted by his success, though they seem to have been hardly able to comprehend how their naughty idle Bobby had become so great a man. His father had been singularly hard of belief. Not until the news of the defence of Arcot arrived in England was the old gentleman heard to growl out that, after all, Bobby had something in him. His expressions of approbation became stronger and stronger as news arrived of one brilliant exploit after another; and he became at length immensely fond and proud of his son.

PERSIAN.

Fourth Honours Paper.

Examiner—Khan Bahadur Maulavi Md. Ibrahim, B.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *only one* of the following extracts with explanatory notes:—   14

A.

شب روان از صبح صادق کعبهٔ جان دیده اند

صبح را چون محرمان کعبه عریان دیده اند

از لباس نفس عریان مانده چون ایمان و صبح

هم بصبح از کعبهٔ جان روی ایمان دیده اند

در شکر ریزند ز اشک خون که گردون را بصبح

همچو پسته سبزو خون آلود و خندان دیده اند

وادی فکـــرت بریده محرم عشق آمده

موقف شرق ایستاده کعبـــهٔ جان دیده اند

روز و شب دیده دو گاو پیسه در قربان گهش

صبح را تیغ و شفــق را خون قربان دیده اند

خوانده اند از لوح دل شرح مناسک بهر آنکه

در دل از خط ید الله صد دبستان دیده اند

نام سلطان خوانده هم بریاسج سلطان از آنکه

دل علامتگاه یاسجهـــای سلطــــان دیده اند

B.

صبعــــدم چون کله بندد آه دود آسای من

چون شفق در خون نشیند چشم شب پیمای من

مجلس غم ساخت ست و من چو بید سوخته

تا بمن راوق کنـــد مژگان می پالای من

رنگ بازیبچه است کار گنبـــد نارنج رنگ

چند جوشم کز برونم نگـــذرد صفـــرای من

تیر باران سحـــر دارم سپر چون نفگنـــد

این کهن گرگ خشن بارانی از غوغای من

این خماهن گون که چون ریم آهنم پالودوسوخت

شد سکاهن پوشش از دود دل دروای من

روی خاک آلود من چون کاه بر دیوار حبس

از رخم که گل کند اشک زمین اندای من

مار دیدی در گیا پیچــــان کنون در غار غم

مار بین پیچیــــده در ساق گیا آسای من

2. (a) Derive محرم and give its various vocalization with their **4** derivative and secondary meanings used in Persian.

(b) What is the signification of دم in صیدم ؟ In what other **5** meanings is this particle used in Persian ? Give examples.

(c) Write in Persian a short note on مناسک, and performances **5** connected therewith. Give also its derivative and secondary meanings.

(d) Write philological notes on سکاهن. دبستان ـ کعبه and **3**

3. Annotate, in Persian, *any five* of the following extracts :— **15**

(a) بود موجـــود را کثــرت برونی

که او وحـــدت ندارد جز درونی

وجود کل ز کثرت گشت ظاهر

که او در وحدت جزوست ساتر

(b) بهر لحظه جوان این کهنه پیرست

بهر دم اندر و حشــر و بشیرست

درو چیزی دو ساعت مینیــاید

در آن لحظه که می میرد بزاید

(c) بقا حقست و باقی جمله فانیست

بیانش جمله در سبع المثانیست

چو کُلّ مَنْ عَلَیْهَا فَانٍ بیــان کرد

لَفِی خَلْقٍ جَدِیْدٍ هم عیــان کرد

(d) جمله رسل بر درش مفلـــس و طالب زکوة

او شده تاج رســـل تاجر صاحب نصـــاب

عطسهٔ او ادم ست عطسهٔ ادم مسیــح

اینت خلف کز شرف عطسهٔ او بود باب

(e) بیـــاد آور مقـــام حـــال فطــرت

کز آنجـــا باز دانــی اصــل فطرت

اَلَستُ بِرَبِّکُـــمّ ایزد چــرا گفـــت

که بود آخر که آن ساعت بلی گفت

(f) شب روان چون رخ صبح آئنه پیدا بینند

کعبه را چهره در ان آئنه پیــدا بینند

گرچه زان آئنه خاتون عرب را نگـــرند

در پس آئنه رومی زن رعنـــا بینفـــد

4. Write, in Persian, a short account of the life of Shaikh Muham- 10
mad Shabistari, and state what led him to write *Gulshan-i Raz*?
What other famous works did he write on Sufism?

5. Translate into English, adding explanatory notes so as to make 12
the sense clear :—

ما فتنهٔ بر تو ایم و تو فتنه بر آئنهٔ

ما را نگاه در تو تــرا اندر آئنهٔ

تا آئنه جمال تو دید و تو حسن خویش

تو عاشق خودی ز تو عاشق تر آئنهٔ

از روی تو در آئنه جانها شود خیـــال

زین روی نازها کنـــد اندر سر آئنهٔ

از نور و صفـــوت لب تو آورد عیـــان

در یک مکان هم آتش و هم کوثر آئنهٔ

اى اَنٽِــه پذير مشو اَنٽِـــه پرس

نِج دلم محَـــواه ر ...... دل بر آنئه

هرجا كه آهن ست بسـوزم ز آه دل

تا هيچ ميقلى نه كند ديگــر آنئه

6. (a) In whose praise was the above *qasida* written by Khaqani? 　6
Give a short account of his life in Persian.

(b) Explain clearly the difference of meaning, if any, that under- 　4
lies the words حسن and جمال. Can one be substituted for the other?
Give your reason.

(c) Give the root-meaning of the word فتنه, and also the different 　3
meanings in which it is used in Persian literature, noticing its develop-
ment.

7. Translate into Persian :— 　20

Popular Feeling in Japan.

The Japanese people unanimously welcome the present opportunity
to return the insults and oppression suffered at the hands of Germany
during the past few years. In saying this I am but repeating what I
hear from their own lips The Government of Japan insists that the
war with Germany is solely the outcome of Japan's adherence to the
terms of the Alliance with Great Britain; but the people say that
most of their troubles during the past decade or so are the outcome
of German influence in Europe and America. German militarism in
Europe has obliged all nations to spend fabulous sums on armaments,
and this has been a dread oppression to the poor people of Japan.
And Germany inflicted on Japan an ineffaceable insult when she
demanded the evacuation of Port Arthur by Japan after the war
with China, the demand being couched in the most insulting words,
while the demand from France and Russia was in terms impeccably
courteous. Since the opening of the conflict in Europe too, Japanese
merchants and manufacturers have suffered great losses on account
of the Germans seizing merchant ships laden with Japanese goods.

PERSIAN.

FIFTH HONOURS PAPER.

Examiner—MAULAVI MD. ABU TAHIR.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into Persian :—   8

اِنَّا فَتَحْنَا لَكَ فَتْحاً مُبِيْناً لِيَغْفِرَ لَكَ اللهُ مَا تَقَدَّمَ مِنْ ذَنْبِكَ

وَمَا تَأَخَّرَ وَ يُتِمَّ نِعْمَتَهُ عَلَيْكَ وَيَهْدِيَكَ صِرَاطاً مُسْتَقِيْماً وَ يَنْصُرَكَ

اللهُ نَصْراً عَزِيْزاً هُوَ الَّذِىْ اَنْزَلَ السَّكِيْنَةَ فِىْ قُلُوْبِ الْمُؤْمِنِيْنَ

لِيَزْدَادُوْا اِيْمَاناً مَعَ اِيْمَانِهِمْ وَ لِلّٰهِ جُنُوْدُ السَّمٰوٰاتِ وَ الْاَرْضِ وَ كَانَ اللهَ

عَلِيْماً حَكِيْماً *

2. Explain the following verses in accordance with the annotation   12
of تفسير حسينى (answer in Persian) :—

ق وَ الْقُرْآنِ الْمَجِيْدِ بَلْ عَجِبُوْا اَنْ جَاءَهُمْ مُنْذِرٌ فَقَالَ الْكٰفِرُوْنَ

هٰذَا شَىْءٌ عَجِيْبٌ ءَ اِذَا مِتْنَا وَ كُنَّا تُرَاباً ذٰلِكَ رَجْعٌ بَعِيْدٌ

قَدْ عَلِمْنَا مَا تَنْقُصُ الْاَرْضُ مِنْهُمْ وَ عِنْدَنَا كِتَابٌ حَفِيْظٌ *

3. (a) What part of speech is اِنَّا ?   3

(b) What kind of ما is in تقدم ما and ما تأخر ?   3

(c) What kind of لا م is in لِلّٰه and لِيَزْدَادُوْا ?   3

(d) What does ء (همزه) signify in ءَ اِذَا مِتْنَا ?   3

4.　Translate into Persian:—　　　　　　　　　　　　　9

سبحان خالق السموات المسموكات - سبحان خالق الارضين
المدحوات - سبحان خالق الافلاك الدائرات - يسبحان خالق
البروج الطالعات - سبحان خالق الكواكب السيارات - سبحان
مرسل الرياح الذاريات - سبحان منشئى السحب الممطرات -
سبحان رب الرعود المسبحات - سبحان رب البروق اللامعات -
سبحان رب البحور الزاخرات - سبحان موسى الجبال
الشامخات - سبحان مدبر الليل و النهار و الاوقات *

5.　Translate into English:—　　　　　　　　　　　　　8

چون بتحليۀ اعتدال مزاج و تعديل قواى جسمانى و نفسانى
متحلى گردد - من حيث البدن و النفس شبيه به اجرام
سماوى باشد - چه توسط بين الاضداد بمنزلۀ خلو از ان ست -
و بواسطۀ اين تصفيه نفس او منتقش بصور حوادث ماضيه
و آتيه برجه جزوى شود - هم چون نفوس فلكيه - يا بواسطۀ
اطلاع بر عالم مثال كه نزد اساطين حكمت بيانى و عيانى ثابت
است - يا بواسطۀ انعكاس صور قدسيه از مصباح نفس ناطقه
بمشكوة خيال و تمثل او بصورت جسمانى كه مقتضاى حقيقت
مرئى و طبيعت مرأت باشد *

6.　(a) What parts of speech are خلو - مقتلى - نفسانى - حليه - 16
مورئى and مشكوة - آتيه - منتقش ؟
(b) Explain نفس ناطقه. How many kinds of نفس are there?　　8
(c) Explain :— نفوس فلكيه - تصفيۀ نفس - اجرام سماوى - 12
انعكاس. and حكمت بيانى و عيانى - عالم مثال

7.　Translate *any five* of the following into Arabic:—　　45
(a) Give my respects to your father.
(b) At what time do you generally retire to sleep?

(c) It is time to go to bed.
(d) Please take a seat by the table.
(e) Will you not take a boiled egg ?
(f) At what do you sell it per yard ?
(g) Why have you not called on us for some time past ?
(h) I am doing quite well.
(i) I must not stay any longer.
(j) I am tired of waiting.

PERSIAN.

Sixth Honours Paper.

Examiner—Maulavi Md. Irfan, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions are of equal numerical value.

Group I.

Any FOUR questions to be attempted.

1. Discuss the sources of the *Shahnama* with a reference to the persons reputed to have taken part in its composition.
2. Write a note on Fariduddin Attár—his biography and literary works. Assign his proper place among Súfi poets.
3. Give a short account of the following works with the names of their authors and subject-matter :—*Kimia-i-Saádat, Baharistan, Miratul Khayal, Qabus-nama, Silsi-latuzzahb.*
4. Give the plan, purpose, and scheme of *Gulshan-i-Raz*, and compare the philosophy it teaches with that of *Sanái*.
5. Trace the development of the art of history-writing in Persian. Name some of the well-known Persian historians with their works.

Group II.

Any THREE questions to be attempted.

1. Describe the Mongol invasion of Persia, the events that led to it, and how it was checked.
2. Comment on the claims of the Abbasides to the Caliphate.
3. Sketch the careers of Humayun and of his contemporary on the Persian throne.
4. Name the places that at different times formed the capital of Bengal, and mention the occasion when each came to be the seat of government.

Group III.

Any THREE questions to be attempted.

1. Distinguish تشبيه from استعاره. Illustrate your answer and name their component parts.

2. Name and explain the rhetorical figures in the following lines :—

بسـوی نافهٔ کاخر صبـا زان طرّه بکشـاید

ز تاب جعد مشکینش چه خون افتاد در دلها

حریفـی بد مـرا سـاقی که هـردم

ز زلف و رخ نمـودی شمس و دی را

3. Explain سبب and وتد, and give their sub-divisions with examples :—

4. Scan and name the metre :—

ساقیا برخیز و در ده جـام را   خـاک برسر کن غم ایام را

ای در تگ و پوی توز آغاز   عنقـای نظـر بلنـد پرواز

PERSIAN.

First Pass Paper.

Examiner—Maulavi Md. Abu Tahir.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1   Translate, adding explanatory notes where necessary :—   12

بهـار آمد که از گلبن همی بانگ هزار آید

بهـر ساعت خروش مرغ زار از مرغزار آید

تو گوئی ارغنون بستند برهر شاخ و هربرگی

ز بس بانگ تذرو و صلصل و دراج و سار آید

بجوشد مغز جان چون بوی گل از بوستان خیزد

بپرد مرغ دل چون بانگ مرغ از شاخسار آید

خروش عندلیب و صوت سار و نالهٔ قمـری

گهی از گل گهی ازسروبن گاه از چنار آید

تو گوئی ساحت بستان بهشت عدن را ماند

ز بس غلمان و حور انجا قطـــار اندر قطار آید

یکی بر کف نهد لاله که ترکیب قدح دارد

یکی بر گل کند تحسیـــن کزو بوی نگار آید

یکی با دلبر ساده بطـــرف بوستـــان گردد

یکی با ساغر باده بطـــرف جویبـــار آید

یکی بیند چمن را بے تامل مرحبـــا گوید

یکی بوید سمن را مات بصنـــع کردگار آید

2. Explain in Persian :— 15

د، بیـــان این شنو یك قصـــه

تا بری از ســـر گفتـــم حصـــه

بر عمر آمد ز قیصر یک رسول

در مدینـــه از بیابـــان نغـــول

گفت کو قصر خلیفه ای حشم

تا من اسب و رحمت را آنجا کشم

قوم گفتندش که او را قد

م، عمر را قصـــر، جان روشنیس

گرچه از میری در او آوازه ایست

همچو درویشان مراورا گازه ایست

ای برادر چون به بینی قصـــر او

چونکه در چشم دلت رستست مو

چشـــم دل از موی علت پاکدار

و انگهان دیدار قصـــرش چشم دار

هركرا هست از هوسها جان پاك

زود بيند حصـــرت ايران پاك

چون محمد پاك شد از نار و دود

هر كجــــا رو كرد وجـــه الله بود

چون رفيقـــى وسوسهٔ بد خواه را

كى به بيفنـــى ثـــم وجه الله را

3. Translate into English:—   12

شب و روز تازان چـــو باد دمان

نه پـــروای اب و نه اندوه نان

چو نزديكـــئ زابلستـــان رسيد

خروش طلايه بدستـــان رسيـــد

كه امد سوارـ ز ايران چو گـــرد

بـــزير اندرش بـــارهٔ رہ نـــورد

تهمتن پذيره شدش با سپـــاه

نهـــادند بر سر بزرگان كـــلاه

پياده شدش گيو و گردان بهـــم

هرانكس كه برزين بد ار بيش و كم

از اسب اندر امد گو نامـــدار

از ايران بپـــرسيـــد و از شهريار

ز رہ سوى ايوان رستم شـــدند

زمانى ببودند و دم بـــرزدند

بگفت انچه بشنيد و نامه بداد

ز سهراب چندى سخن كرد ياد

تهمتن چو بشنید و نامه بخواند

بخندید و زان کار خیره بماند

4. (a) Derive نازان - دمان - رہ نورد - رہ پذیرہ and 5

(b) Analyse the fifth line (پیادہ شدش الخ). 2

5. Translate into English, adding explanatory notes where necessary :—

(a) زاهد ظاهـــر پرست از حال ما آگاہ نیست 8

در حق ما هرچه گوید جای هیچ اکراہ نیست

در طریقت هرچه پیش سالک آمد خیر اوست

بر صراط مستقیـــم ای دل کسی گمــراہ نیست

تا چه بازی رخ نمـــاید بیـــدقی خواهیـــم راند

عرصه شطـــرنج زندان را مجـــال شاہ نیست

اینچه استغناست یا رب و این چه داور حاکمی است

کاین همه زخم نهـــان ست و مجـــال آہ نیست

(b) ترسم ان قوم که بر درد کشــان میخندیدند 8

در ســـرکار خـــرابات کنند ایمــان را

یار مردانِ خــدا باش که در کشتـــی نوح

هست خاکی که بابی نخرد طـــوفان را

ماہ کنعانی من مسند مصـــر آن تو شد

وقت انســـت که پدرود کنی زندان را

ملک ازادگی و کنج قنـــاعت گنجیست

که بشمـــشیـــر میسر نشـــود سلطـــان را

10 .شاہ - سالک - طریقت - بیدق - رخ طوفان زندان - Write notes on (c)
in extract (a), and explain fully the following in extract (b) :—
ماہ کنعانی من مسند مصر آن تو شد - هست خاکی که بابی نخرد طوفان را

6.   What is **حاصل بالمصدر** ?   How is it formed ?   State the differ-ent ways and give examples.

7.   Both **حافظ** and **مولانا روم** are believed to be Sufistic poets.   20 State the distinctive features of the writings of each of them.   Answer in Persian.

PERSIAN.

Second Pass Paper.

Examiner—Maulavi Md. Irfan, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1.   Translate into English : --   10

و العديٰت ضبحا فالموريات قدحا فالمغيرات صبحا فاثرن به

نقعا فوسطن به جمعا - انّ الانسان لربه لكنود و انه على ذلك

لشهيد و انه لحب الخير لشديد افلا يعلم اذا بعثر ما فى القبور

و حصل ما فى الصدور انّ ربهم بهم يومئذ لخبير *

2. (*a*) Write in your own Persian the tradition mentioned in con-   4 nexion with the revelation of this **سوره**.   Where was this **سوره** re-vealed ?

(*b*) In the passage **ان الانسان لربه لكنود** state to whom does the   4 word **انسان** refer ?   Give the various interpretations of the word **كنود**.

(*c*) Point out the antecedents of **ه** in the two **انه** in the above   2 extract.

3.   Render into Persian *any one* of the following extracts :—   10

A.

قالت بلغنى ايها الملك السعيد ان السندباد البحرى لما

ضرب الحية بالقضيب الذهب الذى كان بيده و القت الرجل

يمن فمما قال فتقدم الى الرجل و قال حيث كان خلاصى على

يديك من هذه الحية فما بقيت افارقك و انت صرت رفيقى

فى هذا الجبل فقلت له مرحبا وسرنا فى ذلك الجبل و
اذا بقوم اقبلوا علينا فنظرت اليهم و اذا فيهم الرجل الذى كان
حملنى على اكتافه و طاربى فتقدمت اليه و اعتذرت له
و تلطفت به و قلت له يا صاحبى ما هكذا تفعل الاصحاب
باصحابهم فقال لى الرجل انت الذى اهلكتنا بتسبيحك
على ظهرى *

B.

ان طالب بن سهل سار هو و اصحابه يقطعون البلاد من الشام
الى ان دخلوا مصر فتلقاه امير مصر و انزله عنده و اكرمه غاية
الاكرام فى مدة اقامتة عنده ثم بعث معه دليلا الى الصعيد الا
على حتى وصلوا الى الامير موسى بن نصير فلما علم به خرج
اليه و تلقاه و فرح به فناوله الكتاب فاخذه و قرأه و فهم معناه و وضعه
على رأسه و قال سمعا و طاعة لامير المؤمنين ثم انه اتفق رايه
على ان يحضر ارباب دولته فحضروا فسألهم عما بدا له فى الكتاب
فقالوا ايها الامير ان اردت من يدلك على طريق ذلك المكان
فعليك بالشيخ عبد الصمد بن عبد القدوس الصمودى فانه رجل
عارف و قد سافر كثيرا و هو خبير بالبرارى و القفار و البحار
و سكانها و عجائبها و الارضين و اقطارها *

4. (a) Give the singular or plural, as the case may be, of *any six* 6
of the following words:—

يد - حية - اكتاف - ظهر - قطيب - دليل - مكان - برارى
قفار *

(b) Name the باب and صيغة of *any three* of the following words, 6
and explain the تعليل they have undergone:—

طار - تلقاه ناوله - قراءه - اتفق *

24

5. (a) How are *causal verbs* formed in Arabic? Give examples,   6
with an explanation of any differences which occur.

(b) Explain the difference between ربا and رب, illustrating your   3
answer with examples.

6. Translate into English :—

الحق حقه باز چرخ ناساز طرفه آتشدستی بکار برده هر مهره   16

که در توپ پنهان کرده بودند از مهرهٔ پشت گریختگان نمایان

ساخت و نراد فلک غلط انداز عجب مهرهٔ بطاس انداخت

دوششی که آن ششهزاریِ ششهزار سوار زده بود بخثال زیاد گوله

های تفنگ در باخت اما صد آفرین بر شوکت آن سرگروه

با تدبیر و هزار تحسین بر سرعت آن سبار ز دلیر که نقاره نواخته

از آنجا مراجعت کرد و مانند صدا از کوه فورا برگشت و الا

چنانکه رفیقان بے باک دران مکان خطر ناک وی را تنها

گذاشته پیش رفته بودند اگر محصوران زیاده رو کم بخت

و متنصفان سست رای دل سخت بمقتضای " قست

قلوبهم فهی کالحجارة او اشد قسوة " در پناه سنگ قباحتی

میکردند حیف بود دیگر چرخ پیر را در پیدا کردن چنین

جوانی چه قدر بایستی گشت *

7. (a) Write notes in Persian on—   9

حقه باز چرخ - مهرهٔ بطاس انداخت * دوششی که آن

ششهزاریِ ششهزار سوار زده بود بخثال زیادهٔ گوله هاے تفنگ

در باخت *

(b) Comment on the phrase آتشدستی بکار برد. Give the correct   3
expression from which the above has been borrowed.

(c) What is the difference between مهرهٔ بطاس انداخت And   1
مهرهٔ بطاس زد ?

8. Explain in Persian *any five* of the following phrases:— 10

(a) از حوصلهٔ شناسائی قدمی فراتر نهد *

(b) از عنفوان هستی خدیو خدا آگاهان سر آغاز گردانید *

(c) معامله نافهمان از سنوح این سانحه در گو ناکامی فرو شدند *

(d) حکم معلی از مکمن سیاست و معدلت صادر شد *

(e) ملازمان عتبهٔ اقبال برهنمونی سعادت اخلاص گزینی گردند *

(f) کتابه مدارج اخلاص مخلصان بر پیشطاق عیان نگارش یابد *

(g) حاجی محراب به پیش طاق دولت خانه چون ساعیان
صفا و مروه دویده آمد *

9. Write in your own Persian the substance of— 10

وقایع ایام محاصرهٔ قلعه حیدرآباد بتاریخ چهاردهم شهر رجب
سنه ۲۵ جلوس شاه عالمگیر غازی *

PERSIAN.

Third Pass Paper.

Examiner—Maulavi Hedayet Hossain.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English:—

(a) و این بدبخت بعد از حصول نقود نامصدود و جواهر زواهر - 25
فرمود تا در موضع خوش هوا از منزهات شام باغی وسیع مشتمل
بر قصر بدیع طرح انداختند - و جدار آنرا خشتی از سیم و خشتی
از زر ساختند - و فرمود تا هریک از سرهنگان او که عدد ایشان
نه هزار می رسید در این بستان از برای خود کوشکی تعمیر

نمايند - و اين گلستان در مدت پانصد سال صورت اتمام يافت

و شداد در نواحی حضر موت اين خبر شنيده بر جناح استعجال

بدانجانب توجه نمود - در اثنای راه اهوئی در نهايت زيبائی

به نظر او در آمد - شداد به طمع صيد اسپ بر انگيخته چون

از سپاه خود دور افتاد سواری مهيب ديد که متوجه اوست -

متوهم گشته - سوار نزديک رسيده پرسيد که به سبب

اين عمارت که ساختی از چنگ اجل امان يافتی - شداد

از مهابت اين سخن بر خود بلرزيد و گفت، که تو کيستی -

جواب داد که ملک الموت ام و به قبض روح تو امده ام -

شداد گفت مرا چندان امان ده که يک نظر بر اين گلستان

بهشت نشان اندازم - عزرائيل گفت رخصت نيست - انگه

شداد از اسپ افتاده فارس روحش از رکب تن پياده گشت

و سپاهش از جانب اسمان اوازت هايل شنيدند و به نار جهنم

واصل شدند و آن عمارت عالی از عيون مردم پنهان ماند ٭

(b)   روضهٔ خلد برين خلوت درويشانست

مايه محتشمی خدمت درويشانست

کنج غزلت که طلسمات عجايب دارد

فتح آن در نظر همت درويشانست

قصر فردوس که رضوانش به دربانی رفت

منظری از چمن نزهت درويشانست

آنچه زر ميشود از پرتو آن قلب سياه

کيميائيست که در صحبت درويشانست

و آنكه بیشش بنهد تاج تكبر خورشید

كبریائیست كه در حشمت درویشانست

دولتی را كه نبا شد غم از آسیب زوال

بے تكلف بشنو دولت درویشـانست

خسروان قبلهٔ حاجات جهان اند ولی

از ازل تا بابد فرصت درویشـــانست

روی مقصود كه شاهان‌جهان می طلبند

مظهر ائینه طلعت درویشــانست

ای توانگر مفروش اینهمه نخوت كه ترا

سروری در كنف همت درویشانست

گنج قارون كه فرو میرود از قعر هفـــوز

خوانده باشی‌تو كه از غیرت درویشانست

بنده آصف عهــدیم كه در سلطنتش

صورت خواجگی و سیرت درویشانست

حافظ اینجا بادب باش كه سلطان و ملك

همه در بندگی حضرت درویشــانست

2. Translate into simple Persian :— 50

Every one should endeavour so to vary his employments and so to mix them up with amusements and recreation as to obviate the inevitable consequences of monotony.

Recreations are sometimes necessary both to the body and mind of a man, neither of them being able to endure a constant toil without somewhat of refreshment between; and therefore there is a very lawful use of them; but to make it so, it will be necessary to observe these cautions. First, we must take care that the kind of them be lawful, that they be such as have nothing of sin in them; we must not, to recreate ourselves, do anything which is dishonourable to God, or injurious to our neighbour; as they do, who make profane, filthy, or backbiting discourse their recreation. Secondly, we must take care that we use it with moderation; and to do so, we must first be sure not to spend too much time upon it, but remember that the end of recreation is to fit us for business, not to be itself a business to us.

Thirdly, we must not be too vehement and earnest in it, nor set our hearts too much upon it; for that will both ensnare us to the using too much of it, and it will divert and take off our minds from our more necessary employments, like schoolboys who, after a playtime, know not how to set themselves to their books again. Lastly, we must not set up to ourselves any other end of recreation but that lawful one of giving us moderate refreshment.

LATIN.

DR. H. STEPHEN, M.A , D.D.
Paper-sellers— } REV. DR. G. HOWELLS, M.A., PH.D., B.LITT.,
{ B.D.
REV. FATHER F. X. CROHAN, S.J.

FIRST PASS PAPER.

*Examiner—*DR. H. STEPHEN, M.A., D.D.

Candidates are required to give their answers in their own words
as far as practicable.

The figures in the margin indicate full marks.

1. Translate:—   28

    (*a*) Vir bonus et prudens versus reprehendet inertes,
        culpabit duros, incomptis allinet atrum
        transverso calamo signum, ambitiosa recidet
        ornamenta, parum claris lucem dare coget,
        arguet ambigue dictum, mutanda notabit,
        fiet Aristarchus; non dicet: cur ego amicum
        offendam in nugis ? Hae nugae seria ducent
        in mala derisum semel, exceptumque sinistre.

Derive—*inertes, incomptis, ambitiosa,* and *ambigue.* Explain any allusion in the passage.

    (*b*) Nil intentatum nostri liquere poetae ;
        nec minimum meruere decus vestigia Graeca
        ausi deserere, et celebrare domestica facta :
        vel qui praetextas, vel qui docuere togatas.
        Nec virtute foret clarisve potentius armis
        quam lingua Latium, si non offenderet unum·
        quemque poetarum limae labor et mora.   Vos, O
        Pompilius sanguis, carmen reprehendite quod non
        multa dies et multa litura coercuit, atque
        praesectum decies non castigavit ad unguem.

Explain and fully illustrate historically the above passage.

2. To what different forms of poetry does Horace refer in the *Ars*   15
Poetica, and what suggestions does he give regarding each ? What account does he give of the origin and history of the drama ? What does he say about the relation of art and genius in poetical composition ?

3. Translate :— 27

(*a*) Ipse ego nunc miror tantis animique marisque
    fluctibus ingenium non cecidisse meum.
  seu stupor huic studio sive est insania nomen,
    omnis ab hac cura mens relevata mea est.
  saepe ego nimbosis dubius jactabar ab Haedis,
    saepe minax Steropes sidere pontus erat,
  fuscabatque diem custos Atlantidos ursae,
    aut Hyadas seris hauserat Auster aquis;
  saepe maris pars intus erat; tamen ipse trementi
    carmina ducebam qualiacunque manu.
  nunc quoque contenti stridunt Aquilone rudentes,
    inque modum tumuli concava surgit aqua.

Explain this passage fully with its allusions.

(*b*) Si tamen haec navis vento ferretur amico,
    ignoraretur forsitan ista fides :
  si non Euryalus Rutulos cecidisset in hostes,
    Hyrtacidae Nisi gloria nulla foret.
  scilicet ut flavum spectatur in ignibus aurum,
    tempore sic duro est inspicienda fides.
  dum juvat et vultu ridet Fortuna sereno,
    indelibatas cuncta secuntur opes :
  at simul intonuit, fugiunt, nec noscitur ulli
    agminibus comitum qui modo cinctus erat.

Explain the allusion. Scan the last two lines. Give the substance
of the passage describing Ovid's last night in Rome.

4. Translate (unprepared) :—

(*a*) *Ovid's description of primitive men :—* 18

  Ante Jovem genitum terras habuisse feruntur
    Arcades, et luna gens prior illa fuit.
  vita feris similis, nullos agitata per usus :
    artis adhuc expers et rude vulgus erat.
  pro domibus frondes norant, pro frugibus herbas,
    nectar erat palmis hausta duabus aqua.
  nullus anhelabat sub adunco vomere taurus,
    nulla sub imperio terra colentis erat :
  nullus adhuc erat usus equi ; se quisque ferebat :
    ibat ovis lana corpus amicta sua.
  sub Jove durabant et corpora nuda gerebant,
    docta graves imbres et tolerare Notos.

(*b*) *Phaethon struck down by lightning :—* 15

  At pater omnipotens superos testatus et ipsum
  qui dederat currus, nisi opem ferat, omnia fato
  interitura gravi, summam petit arduus arcem,
  unde solet latis nubes inducere terris ;
  unde movet tonitrus, vibrataque fulmina jactat.
  intonat ; et dextra libratum fulmen ab aure
  misit in aurigam ; pariterque animaque rotisque
  expulit, et saevis compescuit ignibus ignes.
  at Phaethon, rutilos flamma populante capillos,
  volvitur in praeceps, longoque per aëra tractu
  fertur ; ut interdum de caelo stella sereno,
  etsi non cecidit, potuit cecidisse videri.

LATIN.

Second Pass Paper.

Examiner—G. H. Luce, Esq., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate :—   15
   (a) ' Apud exercitum mihi fueris,' inquit, ' tot annos, forum non
attigeris ? Afueris tam diu ut cum longo intervallo veneris cum his,
qui in foro habitarint, de dignitate contendas ?' Primum ista nostra
assiduitas, Servi, nescis quantum interdum adferat hominibus fastidii,
quantum satietatis.   Mihi quidem vehementer expedit positam in
oculis esse gratiam, sed tamen ego mei satietatem magno meo labore
superavi, et tu idem fortasse : verum tamen utrique nostrum desi-
derium nihil obfuisset.
   Parse—*fastidii, idem.*
   Give the principal parts of*-attigeris, adferat.*

   (b) Legem ambitus flagitasti, quae tibi non deerat ; erat enim
severissime scripta Calpurnia.   Gestus est mos et voluntati et digni-
tati tuae.   Sed tota illa lex accusationem tuam, si haberes nocentem
reum, fortasse armasset, petitioni vero refragata est.   Poena gravior
in plebem tua voce efflagitata est ; commoti animi tenuiorum : exili-
um in nostrum ordinem : concessit senatus postulationi tuae.
   Explain the use of the subjunctive in *haberes, armasset.*

   (c) Non igitur, si L. Natta, summo loco adulescens, qui et quo
animo iam sit et qualis vir futurus sit videmus, in equitum centuriis
voluit esse et ad hoc officium necessitudinis et ad reliquum tempus
gratiosus, id erit eius vitrico fraudi aut crimini, nec si virgo Vestalis,
huius propinqua et necessaria, locum suum gladiatorium concessit
huic, non et illa pie fecit et hic a culpa est remotus.
   Write a note on *virgo Vestalis.*

2. Translate and explain :—   6
   (a) Fuit enim quidem summo ingenio vir, Zeno, cuius invento-
rum aemuli Stoici nominantur.
   (b) Horum ingenio senes ad coemptiones faciendas interimendo-
rum sacrorum causa reperti sunt.
   (c) Inventus est scriba quidem Cn. Flavius, qui cornicum oculos
confixerit.

3. Explain :—*quae mancipi sunt, coemptio, praetextati filii, pugnam   6
navalem ad Tenedum commissam, publicani, Diogenes Cynicus.*

Either,

4. State briefly the circumstances that led to the prosecution of   10
Murena.

Or,

What is the main line of Cicero's arguments in defence of Murena ?

5. Translate :—   20
   (a) Inde exercitu victore reducto ipse, cum factis vir magnificus
tum factorum ostentator haud minor, spolia ducis hostium caesi sus-
pensa fabricato ad id apte ferculo gerens in Capitolium ascendit
ibique ea cum ad quercum pastoribus sacram deposuisset, simul cum
dono designavit templo Iovis finis cognomenque addidit deo. ' Iuppi-

ter Feretri,' inquit, 'haec tibi victor Romulus rex regia arma fero
templumque his regionibus, quas modo animo metatus sum, dedico,
sedem opimis spoliis, quae regibus ducibusque hostium caesis me auc-
torem sequentes posteri ferent.'

Write notes on—*ferculo, Iuppiter Feretri, opimis spoliis.*

Explain the use of the subjunctive in *deposuisset.*

Summarize the uses of *cum* with the Indicative.

(*b*) Ad Ianiculum forte ventum erat. Ibi ei carpento sedenti cum
uxore aquila suspensis demissa leniter alis pilleum aufert: sup*r*que
carpentum cum magno clangore volitans rursus velut ministerio divi-
nitus missa capiti apte reponit: inde sublimis abit. Accepisse id
augurium laeta dicitur Tanaquil, perita, ut vulgo Etrusci, caelestium
prodigiorum mulier. Excelsa et alta speraro complexa virum iubet:
eam alitem, ea regione caeli et eius dei nuntiam venisse, circa sum-
mum culmen hominis auspicium fecisse, levasse humano superpositum
capiti decus, ut divinitus eidem redderet.

Explain the use of the cases in—*ei, alis, ministerio, humano.*

Write notes on—*aruspices, ficus Ruminalis, consualia, cloacis fast-
igio in Tiberim ductis.*

Either.

6. Indicate, with special reference to Book 1, Livy's merits and
demerits as a historian.   10

Or,

What reasons have we for doubting Livy's account of the Kings at
Rome ?

7. Translate :—   15

(*a*) Sed diique et homines prohibuere redemptos vivere Romanos.
Nam forte quadam, priusquam infanda merces perficeretur, per alter-
cationem nondum omni auro appenso, dictator intervenit auterrique
aurum de medio et Gallos submoveri iubet. Cum illi renitentes
pactos dicerent sese, negat eam pactionem ratam esse, quae, postquam
ipse dictator creatus esset, iniussu suo ab inferioris iuris magistratu
facta esset, denuntiatque Gallis, ut se ad proelium expediant.

(*b*) Huius beneficii gratiam, iudices, fortuna populi Romani et
vestra felicitas et di immortales sibi deberi putant. Nec vero quis-
quam aliter arbitrari potest, nisi qui nullam vim esse ducit numenve
divinum, quem neque imperii nostri magnitudo neque sol ille nec
caeli signorumque motus nec vicissitudines rerum atque ordines mov-
ent, neque id quod maximum est, maiorum sapientia, qui sacra, qui
caerimonias, qui auspicia et ipsi sanctissime coluerunt et nobis suis
posteris prodiderunt.

LATIN.

THIRD PASS PAPER.

Examiner—W. C. WORDSWORTH, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

A. COMPOSITION.

1. Translate into Latin :—

(*a*) Titus was beloved by the Romans, and those whom the Ro-   25
mans loved ever died young. Fate, indeed, did not always require

that they should suffer; but the career of Titus was not only brief,
but remarkable in its latter years for a series of public disasters.   In
the first place the city was visited by a terrible conflagration, which
raged unchecked for three days.   The Capitol itself fell once more a
prey to the flames.   Again Rome suffered from a pestilence, in which,
if one may credit the historians of the time, ten thousand persons
perished daily.   The great eruption of Vesuvius, which overwhelmed
the cities of Campania, was perhaps more alarming, though the loss
it inflicted might be less.   This calamity, as is well known, has been
described to us by the younger Pliny, whose uncle perished in his
own house on the promontory of Misenum.   Herculaneum and Pom-
peii were completely destroyed by the eruption; while other towns
between them and around them suffered but little from the disaster.

(b) Among those who incurred the suspicion of secretly favour-   25
ing the enterprises of Catiline, the most powerful citizen was C.
Julius Caesar.   By continual bodily exercises, Caesar had so strength-
ened his constitution, which in childhood was very weak, that it was
capable of bearing all seasons and climates.   In every undertaking
by which he sought to raise himself to the rank of the first in Rome,
and in the world, fortune favoured him, because, although he in-
dulged in every excess, he still retained command over himself.
Without speaking of his other qualities, we cannot but observe a
peculiar promptness and vigour which characterized all his actions.

B.   Grammar.

1.   Give, with examples, the various types of conditional state-   7
ments used in Latin.

2.   Frame sentences to illustrate the changes involved in convert-   7
ing Direct Discourse into Indirect Discourse.

Either,

3.   Discuss and illustrate the arrangement of words in Latin.   6

Or,

Summarize the general rules of metrical quantity.

C.   Roman History.

Any THREE *questions to be answered.*

1   Review the history of early Rome culminating in its emancipa-   10
tion from the rule of alien princes, and the final abolition of the
kingly office.

2.   ' In the course of little more than a century Rome had become   10
the supreme power in the civilized world.'   Expand and justify this
statement.

3   Review the activities of the Gracchi and distinguish the transi-   10
tory and permanent effects of their legislation.

4.   Review the conditions which brought about the fall of the   10
Roman Republic and made Caesarism inevitable.

GREEK

First Honours Paper.

Paper-setters— { Rev. R. Gée, M.A.
Rev. A. B. Johnston, M.A.
Rev. G. H. C. Angus, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English :— 13

(a) Ἀλλ' ἦ τοι μὲν ταῦτα θεῶν ἐν γούνασι κεῖται,
ἦ κεν νοστήσας ἀποτίσεται, ἦε καὶ οὐκί,
οἷσιν ἐνὶ μεγάροισι· σὲ δὲ φράζεσθαι ἄνωγα
ὅππως κε μνηστῆρας ἀπώσεαι ἐκ μεγάροιο.
εἰ δ' ἄγε νῦν ξυνίει καὶ ἐμῶν ἐμπάζεο μύθων·
αὔριον εἰς ἀγορὴν καλέσας ἥρωας Ἀχαιοὺς
μῦθον πέφραδε πᾶσι, θεοὶ δ' ἐπιμάρτυροι ἔστων.
μνηστῆρας μὲν ἐπὶ σφέτερα σκίδνασθαι ἄνωχθι,
μητέρα δ', εἴ οἱ θυμὸς ἐφορμᾶται γαμέεσθαι,
ἄψ ἴτω ἐς μέγαρον πατρὸς μέγα δυναμένοιο

Write explanatory or grammatical notes on the words underlined 10
above
Scan the third, fourth, and ninth lines above, with comments on
the scansion.

(b) Κτήματα δ' αὐτὸς ἔχοις καὶ δώμασι σοῖσιν ἀνάσσοις.
μὴ γὰρ ὅ γ' ἔλθοι ἀνὴρ ὅς τίς σ' ἀέκοντα βίηφι
κτήματ' ἀπορραίσει, Ἰθάκης ἔτι ναιετοώσης·

Explain the construction of δ' and κτήματα. 3
Write a note on the forms βίηφι and ναιετοώσης, and on differences
of reading in the first line.

(c) " Μέντορ ἀταρτηρέ, φρένας ἠλεέ, ποῖον ἔειπες
ἡμέας ὀτρύνων καταπαυέμεν. ἀργαλέον δὲ
ἀνδράσι καὶ πλεόνεσσι μαχήσασθαι περὶ δαιτί.
εἴ περ γάρ κ' Ὀδυσεὺς Ἰθακήσιος αὐτὸς ἐπελθὼν
δαινυμένους κατὰ δῶμα ἑὸν μνηστῆρας ἀγαυοὺς
ἐξελάσαι μεγάροιο μενοινήσει' ἐνὶ θυμῷ,
οὔ κέν οἱ κεχάροιτο γυνή, μάλα περ χατέουσα,
ἐλθόντ', ἀλλά κεν αὐτοῦ ἀεικέα πότμον ἐπίσποι,
εἰ πλεόνεσσι μάχοιτο· σὺ δ' οὐ κατὰ μοῖραν ἔειπες "

Write a note on the interpretation of the second sentence ἀργαλέον 3
to δαιτί, and on the syntax of φρένας. Parse ἐλθόντ' and ἐπίσποι

Either.

2. What date would you assign to the *Odyssey*, and on what   6
grounds ?

Or,

Enumerate, with examples, the peculiarities of the Homeric use of
the subjunctive.

3. (*a*) Translate into English with grammatical notes :—   10

Ἀλλ' ὃν πόλις στήσειε τοῖδε χρὴ κλύειν
καὶ σμικρὰ καὶ δίκαια καὶ τἀναντία.
καὶ τοῦτον ἂν τὸν ἄνδρα θαρσοίην ἐγὼ
καλῶς μὲν ἄρχειν, εὖ δ' ἂν ἄρχεσθαι θέλειν,
δορός τ' ἂν ἐν χειμῶνι προστεταγμένον
μένειν δίκαιον κἀγαθὸν παραστάτην,
ἀναρχίας δὲ μεῖζον οὐκ ἔστιν κακόν.

(*b*) Translate into English, with notes on grammar or subject   10
matter :—

παρὰ δὲ Κυανέων σπιλάδων διδύμας ἁλὸς
ἀκταὶ Βοσπόριαι ἰδ' ὁ Θρῃκῶν ἄξενος
Σαλμυδησός, ἵν' ἀγχίπτολις Ἄρης
δισσοῖσι Φινείδαις
εἶδεν ἀρατὸν ἕλκος
τυφλωθὲν ἐξ ἀγρίας δάμαρτος
ἀλαὸν ἀλαστόροισιν ὀμμάτων κύκλοις
ἀραχθέντων ὑφ' αἱματηραῖς
χείρεσσι καὶ κερκίδων ἀκμαῖσιν

4. What advance did the drama make in the hands of Sopho-   6
cles ?   What are his chief qualities ?

5. Write notes on :—   9

(*a*) Ἆρ' ἔστ' ἀοιδὰς καὶ γόους πρὸ τοῦ θανεῖν
ὡς οὐδ' ἂν εἷς παύσαιτ' ἄν. εἰ χρείη λέγειν;

(*b*) The difference between the language of the choric odes and
that of the ordinary dialogue, giving illustrations.

(*c*) Καὶ φημὶ δρᾶσαι κοὐκ ἀπαρνοῦμαι τὸ μή.

6. Translate into English :—   30

(*a*)   Εὐίππου, ξένε, τᾶσδε χώρας
ἵκου τὰ κράτιστα γᾶς ἔπαυλα,
τὸν ἀργῆτα Κολωνόν, ἔνθ'
ἁ λίγεια μινύρεται
θαμίζουσα μάλιστ' ἀηδὼν
χλωραῖς ὑπὸ βάσσαις,
τὸν οἰνῶπ' ἀνέχουσα κισσὸν
καὶ τὰν ἄβατον θεοῦ
φυλλάδα μυριόκαρπον ἀνήλιον

ἀνήνεμόν τε πάντων
χειμώνων· ἵν' ὁ βακχιώτας
ἀεὶ Διόνυσος ἐμβατεύει
θείαις ἀμφιπολῶν τιθήναις.

(b) Μέγας δὲ πλευρὰ βοῦς ὑπὸ σμικρᾶς ὅμως
μάστιγος ὀρθὸς εἰς ὁδὸν πορεύεται.
καὶ σοὶ προσέρπον τοῦτ' ἐγὼ τὸ φάρμακον
ὁρῶ τάχ' εἰ μὴ νοῦν κατακτήσει τινά·
ὃς ἀνδρὸς οὐκέτ' ὄντος, ἀλλ' ἤδη σκιᾶς,
θαρσῶν ὑβρίζεις κἀξελευθεροστομεῖς.
οὐ σωφρονήσεις; οὐ μαθών ὃς εἶ φύσιν
ἄλλον τιν' ἄξεις ἄνδρα δεῦρ' ἐλεύθερον,
ὅστις πρὸς ἡμᾶς ἀντὶ σοῦ λέξει τὰ σά;
σοῦ γὰρ λέγοντος οὐκέτ' ἂν μάθοιμ' ἐγώ·
τὴν βάρβαρον γὰρ γλῶσσαν οὐκ ἐπαΐω.

GREEK

SECOND HONOURS PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English :—   17

(a) Μὴ τοίνυν κατ' ἀνθρωπων, ἦ δ' ὅς, σκόπει μονον τοῦτο, εἰ
βούλει ῥᾷον μαθεῖν, ἀλλὰ καὶ κατὰ ζῴων πάντων καὶ φυτῶν, καὶ
συλλήβδην ὅσαπερ ἔχει γένεσιν περὶ πάντων ἴδωμεν ἆρ' οὑτωσὶ
γίγνεται πάντα, οὐκ ἄλλοθεν ἢ ἐκ τῶν ἐναντίων τὰ ἐναντία, ὅσοις
τυγχάνει ὂν τοιοῦτόν τι, οἷον τὸ καλὸν τῷ αἰσχρῷ ἐναντίον που καὶ
δίκαιον ἀδίκῳ, καὶ ἄλλα δὴ μυρία οὕτως ἔχει. τοῦτο οὖν σκεψώμεθα,
ἆρα ἀναγκαῖον ὅσοις ἔστι τι ἐναντίον, μηδαμόθεν ἄλλοθεν αὐτὸ γίγνεσ-
θαι ἢ ἐκ τοῦ αὑτῷ ἐναντίου

(b) Ἴωμεν δή. ἔφη, ἐπὶ ταὐτὰ ἐφ' ἅπερ ἐν τῷ ἔμπροσθεν λογῳ.
αὐτὴ ἡ οὐσία ἧς λόγον δίδομεν τοῦ εἶναι καὶ ἐρωτῶντες καὶ ἀποκρινο-
μενοι, πότερον ὡσαύτως ἀεὶ ἔχει κατὰ ταὐτὰ ἢ ἄλλοτ' ἄλλως; αὐτὸ τὸ
ἴσον, αὐτὸ τὸ καλον, αὐτὸ ἕκαστον ὃ ἔστιν, τὸ ὄν. μή ποτε μεταβολὴν
καὶ ἡντινοῦν ἐνδέχεται. ἢ ἀεὶ αὐτῶν ἕκαστον ὃ ἔστι, μονοειδὲς ὂν αὐτὸ
καθ' αὑτό, ὡσαύτως κατὰ ταὐτὰ ἔχει καὶ οὐδέποτε οὐδαμῇ οὐδαμῶς
ἀλλοίωσιν οὐδεμίαν ἐνδέχεται·

Ὡσαύτως. ἔφη, ἀνάγκη, ὁ Κεβης. κατὰ ταὐτὰ ἔχειν, ὦ Σώκρατες.

Write a grammatical note on *ἧς λόγον δίδομεν τοῦ εἶναι.*

(c) Ὁ τοίνυν, ἔφη, βούλομαι δηλῶσαι, ἄθρει. ἔστιν δὲ τόδε, ὅτι
φαίνεται οὐ μόνον ἐκεῖνα τὰ ἐναντία ἄλληλα οὐ δεχόμενα, ἀλλὰ καὶ

ὅσα οὐκ ὄντ' ἀλλήλοις ἐναντία ἔχει ἀεὶ τἀναντία, οὐδὲ ταῦτα ἔοικε δεχομένοις ἐκείνην τὴν ἰδέαν ἣ ἂν τῇ ἐν αὐτοῖς οὔσῃ ἐναντία ᾖ, ἀλλ' ἐπιούσης αὐτῆς ἤτοι ἀπολλύμενα ἢ ὑπεκχωροῦντα. ἢ οὐ φήσομεν τὰ τρία καὶ ἀπολεῖσθαι πρότερον καὶ ἄλλο ὁτιοῦν πείσεσθαι, πρὶν ὑπομεῖναι ἔτι τρία ὄντα ἄρτια γενέσθαι;

Πάνυ μὲν οὖν, ἔφη ὁ Κέβης.

Write grammatical notes on—ἔοικε δεχομένοις, ἀπολλύμενα.

2. Write short explanatory notes on *four* of the following:— 8

(*a*) Ἔδοξε τοίνυν μοι, ἦ δ' ὅς, μετὰ ταῦτα, ἐπειδὴ ἀπειρήκη τὰ ὄντα σκοπῶν, δεῖν εὐλαβηθῆναι μὴ πάθοιμι ὅπερ οἱ τὸν ἥλιον ἐκλείποντα θεωροῦντες καὶ σκοπούμενοι πάσχουσιν.

(*b*) Εἰ γὰρ ἔροιό με ᾧ ἂν τί ἐν τῷ σώματι ἐγγένηται θερμὸν ἔσται, οὐ τὴν ἀσφαλῆ σοι ἐρῶ ἀπόκρισιν ἐκείνην τὴν ἀμαθῆ . . .

(*c*) Λύουσι γὰρ οἱ ἕνδεκα Σωκράτη.

(*d*) Ἔνορκον ἂν ποιησαίμην ὥσπερ Ἀργεῖοι.

(*e*) Εἶεν δή, ἦ δ' ὃς ὁ Σωκράτης, τὰ μὲν Ἁρμονίας ἡμῖν τῆς Θηβαϊκῆς ἵλεά πως, ὡς ἔοικε, μετρίως γέγονεν· τί δὲ δὴ τὰ Κάδμου, ἔφη, ὦ Κέβης, πῶς ἱλασόμεθα καὶ τίνι λόγῳ;

(*f*) Ταῦτα δὴ λογιζόμενος ἄσμενος ηὑρηκέναι ᾤμην διδάσκαλον τῆς αἰτίας περὶ τῶν ὄντων κατὰ νοῦν ἐμαυτῷ, τὸν Ἀναξαγόραν.

Either,

3. "Οὐκ ἄρα, ὦ ἄριστε, ἡμῖν οὐδαμῇ καλῶς ἔχει ψυχὴν ἁρμονίαν 10 τινὰ φάναι εἶναι."

Trace the argument by which this conclusion was reached.

Or,

How is the Theory of Ideas used to prove the Immortality of the Soul?

4. Translate into English:— 12

(*a*) Καίτοι τί δή ποτε ὦ ἄνδρες Ἀθηναῖοι νομίζετε τὴν μὲν τῶν Παναθηναίων ἑορτὴν καὶ τὴν τῶν Διονυσίων ἀεὶ τοῦ καθήκοντος χρόνου γίγνεσθαι, ἄν τε δεινοὶ λάχωσιν ἄν τε ἰδιῶται οἱ τούτων ἑκατέρων ἐπιμελούμενοι, εἰς ἃ τοσαῦτ' ἀναλίσκεται χρήματα ὅσα οὐδ' εἰς ἕνα τῶν ἀποστόλων, καὶ τοσοῦτον ὄχλον καὶ παρασκευὴν ὅσην οὐκ οἶδ' εἴ τι τῶν ἁπάντων ἔχει, τοὺς δ' ἀποστόλους πάντας ὑμῖν ὑστερίζειν τῶν καιρῶν, τὸν εἰς Μεθώνην, τὸν εἰς Παγασάς, τὸν εἰς Ποτείδαιαν;

Explain the references. 5

(*b*) "Πῶς γὰρ οἴεσθ'" ἔφην "ὦ ἄνδρες Μεσσήνιοι δυσχερῶς ἀκούειν Ὀλυνθίους εἴ τίς τι λέγοι κατὰ Φιλίππου κατ' ἐκείνους τοὺς χρόνους, ὅτ' Ἀνθεμοῦντα μὲν αὐτοῖς ἀφίει, ἧς πάντες οἱ πρότερον Μακεδονίας βασιλεῖς ἀντεποιοῦντο, Ποτείδαιαν δ' ἐδίδου τοὺς Ἀθηναίων ἀποίκους ἐκβάλλων, καὶ τὴν μὲν ἔχθραν τὴν πρὸς ἡμᾶς αὐτὸς

ἀνῄρητο, τὴι χ ραν δ' ἐκείνοις ἐδεδώκει καρποῦσθαι, ἆρα προσδοκᾶν αὐτοὺς τοια . α πείσεσθαι, ἢ <u>λέγοντος ἄν τινος πιιττεύσαι οἴεισθε</u>;"

Parse πείσεσθαι. Explain the construction of the words underlined. Explain the references. 5

(c) 'Αλλ' οὐ <u>φήσετε·</u> ὁ γὰρ οἷς ἂν ἐγὼ ληφθείην, ταῦτα πράττων καὶ κατασκευαζόμενος, οὗτος ἐμοὶ πολεμεῖ, κἂν μήπω βάλλῃ μηδὲ τοξεύῃ. τίσιν οὖν ὑμεῖς κινδυνεύσαιτ' ἄν, εἴ τι γένοιτο; τῷ τὸν Ἑλλήσποντον ἀλλοτριωθῆναι, τῷ Μεγάρωι καὶ τῆς Εὐβοίας τὸν πολεμοῦνθ' ὑμῖν γενέσθαι κύριον, τῷ Πελοποννησίους τἀκείνου φρονῆσαι. εἶτα τὸν τοῦτο τὸ μηχάνημ' ἐπὶ τὴν πόλιν ἱστάντα, τοῦτον εἰρήνην ἄγειν ἐγὼ <u>φῶ</u> πρὸς ὑμᾶς;

Write a note on the syntax of the words underlined. Explain the references. 5

Either,

5. Estimate Demosthenes' policy as a statesman. 8

Or,

Show from these three speeches where Demosthenes' power as a speaker lay.

6. Translate into English:— 30

(a) ΠΡΩ Λέγε μόνον.

ΣΩ Θεῶν μὲν εἰς ἀνθρώπους δόσις. ὥς γε καταφαίνεται ἐμοί, ποθὲν ἐκ θεῶν ἐρρίφη διά τινος Προμηθέως ἅμα φανοτάτῳ τινὶ πυρί. καὶ οἱ μὲν παλαιοί, κρείττονες ἡμῶν καὶ ἐγγυτέρω θεῶν οἰκοῦντες, ταύτην φήμην παρέδοσαν, ὡς ἐξ ἑνὸς μὲν καὶ ἐκ πολλῶν ὄντων τῶν ἀεὶ λεγομένων εἶναι, πέρας δὲ καὶ ἀπειρίαν ἐν αὑτοῖς ξύμφυτον ἐχόντων. δεῖν οὖν ἡμᾶς τούτων οὕτω διακεκοσμημένων ἀεὶ μίαν ἰδέαν περὶ παντὸς ἑκάστοτε θεμένους ζητεῖν· οὑρήσειν γὰρ ἐνοῦσαν.

(b) Τοῦ μὲν οὖν γράψαι πράττοντα καὶ λέγοντα τὰ βέλτιστά με τῷ δήμῳ διατελεῖν καὶ πρόθυμον εἶναι ποιεῖν ὅ τι δύναμαι ἀγαθόν, καὶ ἐπαινεῖν ἐπὶ τούτοις, ἐν τοῖς πεπολιτευμένοις τὴν κρίσιν εἶναι νομίζω· ἀπὸ γὰρ τούτων ἐξεταζομένων εὑρεθήσεται εἴτε ἀληθῆ περὶ ἐμοῦ γέγραφε Κτησιφῶν ταῦτα καὶ προσήκοντα εἴτε καὶ ψευδῆ· τὸ δὲ μὴ προσγράψαντα ἐπειδὰν τὰς εὐθύνας δῷ στεφανοῦν, καὶ ἀνειπεῖν ἐν τῷ θεάτρῳ τὸν στέφανον κελεῦσαι, κοινωνεῖν μὲν ἡγοῦμαι καὶ τοῦτο τοῖς πεπολιτευμένοις, εἴτε ἄξιός εἰμι τοῦ στεφάνου καὶ τῆς ἀναρρήσεως τῆς ἐν τούτοις εἴτε καὶ μή, ἔτι μέντοι καὶ τοὺς νόμους δεικτέον εἶναί μοι δοκεῖ, καθ' οὓς ταῦτα γράφειν ἐξῆν τούτῳ.

GREEK.

Third Honours Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

A.

1. Translate into Greek prose:—   30
The great calamity which had fallen on Argyle had this advantage,
that it enabled him to show, by proofs not to be mistaken, what
manner of man he was. From the day when he quitted Friesland
to the day when his followers separated at Kilpatrick, he had
never been a free agent. He had borne the responsibility of a long
series of measures which his judgment disapproved. Now at length
he stood alone. Captivity had restored to him the noblest kind of
liberty—the liberty of governing himself in all his words and actions
according to his own sense of the right and of the becoming.

2. Translate the first seven lines into Greek iambic verse, or the   20
whole passage into Greek prose:—

> Oh for a lodge in some vast wilderness,
> Some boundless contiguity of shade,
> Where rumour of oppression and deceit,
> Of unsuccessful or successful war,
> Might never reach me more! My ear is pained,
> My soul is sick, with every day's report
> Of wrong and outrage with which earth is filled
> There is no flesh in man's obdurate heart,
> It does not feel for man : the natural bond
> Of brotherhood is severed as the flax
> That falls asunder at the touch of fire.

B.

3. Write notes on the syntax of the words underlined:—   6

(a) Ἠπόρει ὅ τι χρήσαιτο τῷ πράγματι.

(b) Χρῆν σ', εἴπερ ἦσθα μὴ κακός, πείσαντά με
γαμεῖν γάμον τόνδ', ἀλλὰ μὴ σιγῇ φίλων.

(c) Σὺ δ' εἴ τι μέμφει τῆς ἐμῆς ἀπουσίας,
σχές.

(d) Ἐσθλοῦ γὰρ ἀνδρὸς τῇ δίκῃ θ' ὑπηρετεῖν
καὶ τοὺς κακοὺς δρᾶν πανταχοῦ κακῶς ἀεί.

4. Turn into direct speech in Greek:—   8

(a) Ἐλογίζοντο ὡς, εἰ μὴ μάχοιντο, ἀποστήσοιντο αἱ περιοικίδες
πόλεις.

(b) Ἤλπιζον ὑπὸ τῶν παίδων, ἐπειδὴ τελευτήσειαν τὸν βίον, ταφήσεσθαι.

(c) Ἔτι δὲ γιγνώσκειν ἔφασαν φθονοῦντας μὲν αὐτοὺς εἴ τί σφισιν ἀγαθὸν γίγνοιτο, ἐφηδομένους δ' εἴ τις συμφορὰ προσπίπτοι.

(d) Ἐδήλωσεν ὅτι ἕτοιμοί εἰσι μάχεσθαι εἴ τις ἐξέρχοιτο.

5. Illustrate the uses of—   6

Either,

(a) Οὐ μή and μὴ οὐ.

Or,

(b) the preposition πρός.

C.

Not more than THREE *questions to be attempted.*

6. What do you consider to be the main antecedents to Greek   10
history ?
Discuss the justification of the title 'Crete, the forerunner of
Greece.'

7. Compare the reforms of Solon and Cleisthenes and the influence   10
of each on subsequent Athenian life.

Either,

8. Draw a map of Greece showing the territories of the rival   10
powers at the beginning of the Peloponnesian War.

Or,

Give an account of the work of Pheidias.

9. What were the main features and districts of Greek coloniza-   10
tion ?

10. Trace the growth of the Athenian Empire in the fifth century   10
B.C.

11. Summarize the chief events in the relations of Syracuse with   10
Greece.

GREEK.

FOURTH HONOURS PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English :—   10

(a)   Λέξω δέ μέμψιν οὔτιν' ἀνθρώποις ἔχων,
      ἀλλ' ὧν δέδωκ' εὔνοιαν ἐξηγούμενος·
      οἳ πρῶτα μὲν βλέποντες ἔβλεπον μάτην,
      κλύοντες οὐκ ἤκουον, ἀλλ' ὀνειράτων
      ἀλίγκιοι μορφαῖσι τὸν μακρὸν βίον

ἔφυρον εἰκῆ πάντα, κοὔτε πλινθυφεῖς
δόμους προσείλους ἦσαν, οὐ ξυλουργιάν·
κατώρυχες δ' ἔναιον, ὥστ' ἀήσυροι
μύρμηκες, ἄντρων ἐν μυχοῖς ἀνηλίοις.

(b) Τοιάδε μέντοι τῶν φρενοπλήκτων
βουλεύματ' ἔπη τ' ἔστιν ἀκοῦσαι.
τί γὰρ ἐλλείπει μὴ οὐ παραπαίειν
ἡ τοῦδ' εὐχή; τί χαλᾷ μανιῶν ;
ἀλλ' οὖν ὑμεῖς γ' αἱ πημοσύναις
συγκάμνουσαι ταῖς τοῦδε τόπων
μετά ποι χωρεῖτ' ἐκ τῶνδε θοῶς
μὴ φρένας ὑμῶν ἠλιθιώσῃ
βροντῆς μύκημ' ἀτέραμνον.

2. What was the place of Aeschylus in the development of the   6
drama ? What are his chief characteristics ?

3. Translate, with notes on the grammar or subject matter:—   15

(a) Σύ τ', Ἰνάχειον σπέρμα, τοὺς ἐμοὺς λόγους
θυμῷ βάλ', ὡς ἂν τέρματ' ἐκμάθῃς ὁδοῦ.

(b) Ιω. Οὐδ' ἔστιν αὐτῷ τῆσδ' ἀποστροφὴ τύχης ;
Πρ. οὐ δῆτα, πλὴν ἔγωγ' ἂν ἐκ δεσμῶν λυθείς.

(c) Χαλκόν, σίδηρον, ἄργυρον, χρυσόν τε τίς
φήσειεν ἂν πάροιθεν ἐξευρεῖν ἐμοῦ ;

(d) Κευθμὼν καλύπτει τὸν παλαιγενῆ Κρόνο,
αὐτοῖσι συμμάχοισι.

(e) Ἀπόλεμος ὅδε γ' ὁ πόλεμος, ἄπορα πόριμος· οὐδ'
ἔχω τίς ἂν γενοίμαν.

4. Sketch the life of Aeschylus, and mention any points in which   4
it affects his poetry.

5. Translate into English, with grammatical and explanatory   21
notes :—

(a) Ἄγε δὴ φύσιν ἄνδρες ἀμαυρόβιοι, φύλλων γενεᾷ προσόμοιοι,
ὀλιγοδρανέες, πλάσματα πηλοῦ, σκιοειδέα φῦλ' ἀμενηνά,
ἀπτῆνες ἐφημέριοι, ταλαοὶ βροτοί, ἀνέρες εἰκελόνειροι,
προσέχετε τὸν νοῦν τοῖς ἀθανάτοις ἡμῖν, τοῖς αἰὲν ἐοῦσι,
τοῖς αἰθερίοις, τοῖσιν ἀγήρως, τοῖς ἄφθιτα μηδομένοισιν,
ἵν' ἀκούσαντες πάντα παρ' ἡμῶν ὀρθῶς περὶ τῶν μετεώρων,
φύσιν οἰωνῶν γένεσίν τε θεῶν ποταμῶν τ' Ἐρέβους τε Χάους τε
εἰδότες ὀρθῶς παρ' ἐμοῦ Προδίκῳ κλάειν εἴπητε τὸ λοιπόν.

(b) Ἀλλά τις ὠκεῖα Μουσάων φάτις
οἷάπερ ἵππων ἀμαρυγά.
σὺ δὲ πάτερ κτίστορ Αἴτνας,
ζαθέω ἱερῶν ὁμώνυμε,
δὸς ἐμὶν ὅ τι περ
τεᾷ κεφαλᾷ θέλεις
πρόφρων δόμεν ἐμὶν τεΐν.

(c) Ἡρ.   Δίκαι' ἔμοιγε καὶ πάλιν δοκεῖς λέγειν
           περὶ τῆς κόρης, κἄγωγε παραδίδωμί σοι.
   Πε.   τί δαὶ σὺ φῄς;
   Ποσ.   τἀναντία ψηφίζομαι.
   Πε.   ἐν τῷ Τριβαλλῷ πᾶν τὸ πρᾶγμα. τί σὺ λέγεις;
   Τρι.   καλάνι κόραυνα καὶ μεγάλα βασιλιναῦ
           ὄρνιτο παραδίδωμι.
   Ἡρ.   παραδοῦναι λέγει.
   Ποσ.   μὰ τὸν Δί' οὐχ οὗτός γε παραδοῦναι λέγει,
           εἰ μὴ βαδίζειν γ', ὥσπερ αἱ χελιδόνες.
   Πε.   οὐκοῦν παραδοῦναι ταῖς χελιδόσιν λέγει.
   Ποσ.   σφὼ νῦν διαλλάττεσθε καὶ ξυμβαίνετε·
           ἐγὼ δ', ἐπειδὴ σφῷν δοκεῖ, σιγήσομαι.

6. Explain the allusions (without translating) in THREE of the   6
following:—
   (a)   Ὁ Κεραμεικὸς δέξεται νώ.
            δημόσια γὰρ ἵνα ταφῶμεν,
            φήσομεν πρὸς τοὺς στρατηγοὺς
            μαχομένω τοῖς πολεμίοσιν
            ἀποθανεῖν ἐν Ὀρνεαῖς.

   (b)   Καὶ μὴν μὰ τὸν Δί' οὐχὶ νυστάζειν γ' ἔτι
            ὥρα 'στὶν ἡμῖν οὐδὲ μελλονικιᾶν,
            ἀλλ' ὡς τάχιστα δεῖ τι δρᾶν.

   (c)   Ἆρ' ἐστὶν αὑτηγὶ Νεφελοκοκκυγία,
            ἵνα καὶ τὰ Θεογένους τὰ πολλὰ χρήματα
            τά τ' Αἰσχίνου γ' ἅπαντα;

   (d)   Πρῶτα μὲν γὰρ οὗ μάλιστα πᾶς κριτὴς ἐφίεται,
            γλαῦκες ὑμᾶς οὔποτ' ἐπιλείψουσι Λαυριωτικαί·
            ἀλλ' ἐνοικήσουσιν ἔνδον, ἔν τε τοῖς βαλαντίοις
            ἐννεοττεύσουσι κἀκλέψουσι μικρὰ κέρματα;

   (e)   Ἔστι γὰρ δένδρον πεφυκὸς
            ἔκτοπόν τι, Καρδίας ἀ-
            πωτέρω, Κλεώνυμος,
            χρήσιμον μὲν οὐδέν, ἄλ-
            λως δὲ δειλὸν καὶ μέγα.
            τοῦτο τοῦ μὲν ἦρος ἀεὶ
            βλαστάνει καὶ συκοφαντεῖ,
            τοῦ δὲ χειμῶνος πάλιν τὰς
            ἀσπίδας φυλλορροεῖ.

7. *Either*, What do you consider to have been Aristophanes'   8
purpose in writing this play ?
   Or, Discuss the function of the Chorus in the *Birds*.

8. Translate into Greek iambics A or B.   30
   Or, Translate into Greek prose A *and* B.

A.

The Isles of Greece! The Isles of Greece!
　Where burning Sappho loved and sung,
Where grew the arts of war and peace,—
　Where Delos rose, and Phoebus sprung!
Eternal summer gilds them yet,
But all, except their sun, is set;
The Scian and the Teian muse,
　The hero's harp, the lover's lute,
Have found the fame your shores refuse;
　Their place of birth alone is mute
To sounds which echo farther west
Than your sires' ' Islands of the Blest.'

B.

'Tis Greece, but living Greece no more!
So coldly sweet, so deadly fair,
We start, for soul is wanting there.
Hers is the loveliness in death,
That parts not quite with parting breath;
But beauty with that fearful bloom,
That hue which haunts it to the tomb,
Expression's last receding ray,
A gilded halo hovering round decay,
The farewell beam of Feeling pass'd away!
Spark of that flame, perchance of heavenly birth,
Which gleams, but warms no more its cherished earth!

GREEK.

FIFTH HONOURS PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1.　Translate into English:—　　　　　　　　　　　　25

(a) Κίνησις γὰρ αὕτη μεγίστη δὴ τοῖς Ἕλλησιν ἐγένετο καὶ μέρει τινὶ τῶν βαρβάρων, ὡς δὲ εἰπεῖν, καὶ ἐπὶ πλεῖστον ἀνθρώπων. τὰ γὰρ πρὸ αὐτῶν καὶ τὰ ἔτι παλαιότερα σαφῶς μὲν εὑρεῖν διὰ χρόνου πλῆθος ἀδύνατα ἦν· ἐκ δὲ τεκμηρίων ὧν ἐπὶ μακρότατον σκοποῦντί μοι πιστεῦσαι ξυμβαίνει οὐ μεγάλα νομίζω γενέσθαι οὔτε κατὰ τοὺς πυλέμους οὔτε ἐς τὰ ἄλλα

Write a note on the construction of ὧν.　　　　　　2

(b) Λακεδαιμονίων γὰρ εἰ ἡ πόλις ἐρημωθείη, λειφθείη δὲ τά τε ἱερὰ καὶ τῆς κατασκευῆς τὰ ἐδάφη, πολλὴν ἂν οἶμαι ἀπιστίαν τῆς

δυνάμεως <u>προελθόντος</u> πολλοῦ χρόνου τοῖς ἔπειτα πρὸς τὸ κλέος
αὑτῶν εἶναι· καίτοι Πελοποννήσου τῶν πέντε τὰς δύο μοίρας νέμονται,
τῆς τε ξυμπάσης ἡγοῦνται καὶ τῶν ἔξω ξυμμάχων πολλῶν· ὅμως δὲ
οὔτε <u>ξυνοικισθείσης</u> πόλεως οὔτε ἱεροῖς καὶ κατασκευαῖς πολυτελέσι
<u>χρησαμένης</u>, κατὰ κώμας δὲ τῷ παλαιῷ τῆς Ἑλλάδος τρόπῳ οἰκισ-
θείσης, φαίνοιτ' ἂν ὑποδεεστέρα· Ἀθηναίων δὲ τὸ αὐτὸ τοῦτο <u>παθόν-
των</u> διπλασίαν <u>ἂν τὴν δύναμιν</u> εἰκάζεσθαι ἀπὸ τῆς φανερᾶς ὄψεως τῆς
πόλεως ἢ ἔστιν.

Explain the various uses of the participles underlined above 5
Explain the use of ἄν where it is underlined

(c) Γνόντες δὲ οἱ Ἐπιδάμνιοι οὐδεμίαν σφίσιν ἀπὸ Κερκύρας
τιμωρίαν <u>οὖσαν</u>, ἐν ἀπόρῳ εἶχοντο θέσθαι τὸ παρόν· καὶ πέμψαντες ἐς
Δελφοὺς τὸν θεὸν ἐπήροντο εἰ <u>παραδοῖεν</u> Κορινθίοις τὴν πόλιν ὡς
οἰκισταῖς, καὶ τιμωρίαν τινὰ <u>πειρῷντο ἀπ'</u> αὐτῶν ποιεῖσθαι. ὁ δ'
αὐτοῖς ἀνεῖλε παραδοῦναι καὶ ἡγεμόνας ποιεῖσθαι

Write a note on the syntax of the words underlined above. 5
Explain the references

(d) Ἔδοξεν οὖν αὐτοῖς ἄνδρας ἐς κελήτιον ἐμβιβάσαντας ἄνευ
κηρυκείου προσπέμψαι τοῖς Ἀθηναίοις καὶ πεῖραν ποιήσασθαι πέμ-
ψαντές τε ἔλεγον τοιάδε. · Ἀδικεῖτε, ὦ ἄνδρες Ἀθηναῖοι, πολέμου
ἄρχοντες καὶ σπονδὰς λύοντες ἡμῖν γὰρ πολεμίους τοὺς ἡμετέρους
τιμωρουμένοις ἐμποδὼν ἵστασθε ὅπλα ἀνταιρόμενοι εἰ δ' ὑμῖν°γνώμη
ἐστὶ κωλύειν τε ἡμᾶς ἐπὶ Κέρκυραν ἢ ἄλλοσε εἴ ποι βουλόμεθα πλεῖν,
καὶ τὰς σπονδὰς λύετε, ἡμᾶς τούσδε λαβόντες πρῶτον χρήσασθε ὡς
πολεμίοις."

Explain the references. 3

(e) Ἆρ' ἄξιοί ἐσμεν, ὦ Λακεδαιμόνιοι, καὶ προθυμίας ἕνεκα τῆς
τότε καὶ γνώμης ξυνέσεως <u>ἀρχῆς</u> γε <u>ἧς</u> ἔχομεν τοῖς Ἕλλησι μὴ οὕτως
ἄγαν ἐπιφθόνως διακεῖσθαι, καὶ γὰρ αὐτὴν τήνδε ἐλάβομεν οὐ βιασά-
μενοι, ἀλλ' ὑμῶν μὲν οὐκ ἐθελησάντων παραμεῖναι πρὸς τὰ ὑπόλοιπα
τοῦ βαρβάρου, ἡμῖν δὲ προσελθόντων τῶν ξυμμάχων καὶ αὐτῶν δεηθέν-
των ἡγεμόνας καταστῆναι· ἐξ αὐτοῦ δὲ τοῦ ἔργου κατηναγκάσθημεν τὸ
πρῶτον προαγαγεῖν αὐτὴν ἐς τόδε, μάλιστα μὲν ὑπὸ δε.ως, ἔπειτα δὲ
καὶ τιμῆς, ὕστερον καὶ ὠφελείας.

Explain the genitives underlined above 8
Explain the references.

(f) Ἄλλους γ' ἂν οὖν οἰόμεθα τὰ ἡμέτερα λαβόντας δεῖξαι ἂν
μάλιστα εἴ τι μετριάζομεν· ἡμῖν δὲ καὶ ἐκ τοῦ ἐπιεικοῦς ἀδοξία τὸ
πλέον ἢ ἔπαινος οὐκ εἰκότως περιέστη καὶ ἐλασσούμενοι γὰρ ἐν ταῖς
ξυμβολαίαις πρὸς τοὺς ξυμμάχους δίκαις καὶ παρ' ἡμῖν αὐτοῖς ἐν τοῖς
ὁμοίοις νόμοις ποιήσαντες τὰς κρίσεις φιλοδικεῖν δοκοῦμεν

Explain clearly the construction in the first sentence down to 6
μετριάζομεν.

Explain the references in the second sentence.

2.   *Either,*

What were the causes of the Peloponnesian War ?   9

                 Or,

Criticize the Athenian policy in making an alliance with Corcyra.

3.   *Either,*

Describe the naval battle between Corinth and Corcyra which   7
was fought shortly after the Athenians had entered into alliance with
Corcyra.   *Or,*

Describe the early operations against Potidaea.

4.   Translate into Greek : —   *Either,*   30

     (*a*) In this character of the Americans. a love of freedom is the
predominating feature which marks and distinguishes the whole;
and as an ardent is always a jealous affection, your Colonies
become suspicious, restive and untractable, whenever they see the
least attempt to wrest from them by force, or shuffle from them by
chicane, what they think the only advantage worth living for. This
fierce spirit of liberty is stronger in the English Colonies probably
than in any other people of the earth ; and this from a great variety
of powerful causes ; which, to understand the true temper of their
minds and the direction which this spirit takes, it will not be amiss
to lay open somewhat more largely.

                 Or,

     (*b*) The last cause of this disobedient spirit in the Colonies is
hardly less powerful than the rest, as it is not merely moral, but laid
deep in the natural constitution of things. Three thousand miles of
ocean lie between you and them. No contrivance can prevent the
effect of this distance in weakening government. Seas roll, and
months pass, between the order and the execution ; and the want of
a speedy explanation of a single point is enough to defeat a whole
system. You have indeed winged ministers of vengeance, who
carry your bolts in their pounces to the remotest verge of the sea.
But there a power steps in, that limits the arrogance of raging pas-
sions and furious elements, and says, ' So far shalt thou go and no
farther.'   ,

GREEK.

Sixth Honours Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

A.

1.   Translate into English :—

     (*a*) Ὣς ὤρμαινε μένων, ὁ δέ οἱ σχεδὸν ἦλθεν Ἀχιλλεὺς   20
     ἶσος Ἐνυαλίῳ, κορυθάϊκι πτολεμιστῇ,

σείων Πηλιάδα μελίην κατὰ δεξιὸν ὦμον
δεινήν· ἀμφὶ δὲ χαλκὸς ἐλάμπετο εἴκελος αὐγῇ
ἢ πυρὸς αἰθομένου ἢ ἠελίου ἀνιόντος.
Ἕκτορα δ', ὡς ἐνόησεν, ἕλε τρόμος· οὐδ' ἄρ' ἔτ' ἔτλη
αὖθι μένειν, ὀπίσω δὲ πύλας λίπε, βῆ δὲ φοβηθείς·
Πηλείδης δ' ἐπόρουσε ποσὶ κραιπνοῖσι πεποιθώς.
ἠύτε κίρκος ὄρεσφιν, ἐλαφρότατος πετεηνῶν,
ῥηϊδίως οἴμησε μετὰ τρήρωνα πέλειαν,
ἡ δέ θ' ὕπαιθα φοβεῖται, ὁ δ' ἐγγύθεν ὀξὺ λεληκὼς
ταρφέ' ἐπαΐσσει, ἑλέειν τέ ἑ θυμὸς ἀνώγει·
ὣς ἄρ' ὅ γ' ἐμμεμαὼς ἰθὺς πέτετο, τρέσε δ' Ἕκτωρ
τεῖχος ὕπο Τρώων, λαιψηρὰ δὲ γούνατ' ἐνώμα.
οἱ δὲ παρὰ σκοπιὴν καὶ ἐρινεὸν ἠνεμοέντα
τείχεος αἰὲν ὑπὲκ κατ' ἀμαξιτὸν ἐσσεύοντο,
κρουνὼ δ' ἵκανον καλλιρρόω· ἔνθα δὲ πηγαὶ
δοιαὶ ἀναΐσσουσι Σκαμάνδρου δινήεντος.
ἡ μὲν γάρ θ' ὕδατι λιαρῷ ῥέει, ἀμφὶ δὲ καπνὸς
γίγνεται ἐξ αὐτῆς ὡς εἰ πυρὸς αἰθομένοιο·
ἡ δ' ἑτέρη θέρεϊ προρέει ἐϊκυῖα χαλάζῃ,
ἢ χιόνι ψυχρῇ, ἢ ἐξ ὕδατος κρυστάλλῳ.

(b) Ὄρυσσον δὲ ὧδε, δασάμενοι τὸν χῶρον οἱ βάρβαροι κατὰ 20
ἔθνεα, κατὰ Σάνην πόλιν σχοινοτενὲς ποιησάμενοι· ἐπεὶ δὲ ἐγένετο
βαθεῖα ἡ διῶρυξ, οἱ μὲν κατώτατα ἑστεῶτες ὤρυσσον, ἕτεροι δὲ παρε-
δίδοσαν τὸν αἰεὶ ἐξορυσσόμενον χοῦν ἄλλοισι κατύπερθε ἑστεῶσι ἐπὶ
βάθρων, οἱ δ' αὖ ἐκδεκόμενοι ἑτέροισι, ἕως ἀπίκοντο ἐς τοὺς ἀνωτάτω,
οὗτοι δὲ ἐξεφόρεόν τε καὶ ἐξέβαλλον. τοῖσι μὲν νῦν ἄλλοισι, πλὴν
Φοινίκων, καταρρηγνύμενοι οἱ κρημνοὶ τοῦ ὀρύγματος πόνον διπλήσιον
παρεῖχον· ἅτε γὰρ τοῦ τε ἄνω στόματος καὶ τοῦ κάτω τὰ αὐτὰ μέτρα
ποιευμένων, ἔμελλέ σφι τοιοῦτο ἀποβήσεσθαι. οἱ δὲ Φοίνικες σοφίην
ἔν τε τοῖσι ἄλλοισι ἔργοισι ἀποδείκνυνται· καὶ δὴ καὶ ἐν ἐκείνω.
ἀπολαχόντες γὰρ μόριον, ὅσον αὐτοῖσι ἐπέβαλλε ὤρυσσον τὸ μὲν ἄνω
στόμα τῆς διώρυχος ποιεῦντες διπλήσιον ἢ ὅσον ἔδει αὐτὴν τὴν διώ-
ρυχα γενέσθαι. προβαίνοντος δὲ τοῦ ἔργου συνῆγον αἰεί· κάτω τε δὴ
ἐγίνετο, καὶ ἐξισοῦτο τοῖσι ἄλλοισι τὸ ἔργον. ἐνθαῦτα δὴ λειμών
ἐστι, ἵνα σφι ἀγορή τε ἐγίνετο καὶ πρητήριον· σῖτος δέ σφισι πολλὸς
ἐφοίτα ἐπ τῆς Ἀσίης ἀληλεσμένος.

B.

Not more than THREE *questions to be answered.*

2. Discuss the literary integrity of the *Iliad*.   10
3. Compare the historical merit of Herodotus and Thucydides.   10
4. Sketch the origin and development of Greek Drama up +   10
Aeschylus.
5. Compare, with illustrations, the Old and New Comedy.   10
6. What do you know of—Sappho, Phrynichus, Antiphon ?   10

C.

PHILOLOGY.

Do THREE *questions only.*

7. Give an account of the Greek genitive case, its forms and uses, 10
with their origin.

8. Explain and illustrate Grimm's law and Verner's law by refer- 10
ence to Sanskrit, Greek and English words.

9. Give some account of Ablaut, and the use of **Analogy.** 10

10. Comment on four of the following—θεάων, ἵπποιν, ἠδεῖ, τὰ σῖτα, 10
να, ὕμμι ἰν

11. What light does philology throw upon the 'Homeric problem'? 10

GREEK.

FIRST PASS PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English:— 12

(a) Βῆ δ' ἰθὺς προθύροιο, νεμεσσήθη δ' ἐνὶ θυμῷ
ξεῖνον δηθὰ θύρῃσιν ἐφεστάμεν· ἐγγύθι δὲ στὰς
χεῖρ' ἕλε δεξιτερὴν καὶ ἐδέξατο χάλκεον ἔγχος,
καί μιν φωνήσας ἔπεα πτερόεντα προσηύδα·
" Χαῖρε, ξεῖνε, παρ' ἄμμι φιλήσεαι· αὐτὰρ ἔπειτα
δείπνου πασσάμενος μυθήσεαι ὅττεό σε χρή."

Write notes on the form or syntax of the words underlined above. 12
Scan the last three lines.

(b) Τὴν δ' αὖ Τηλέμαχος πεπνυμένος ἀντίον ηὔδα.
" μῆτερ ἐμή, τί τ' ἄρα φθονέεις ἐρίηρον ἀοιδὸν
τέρπειν ὅππῃ οἱ νόος ὄρνυται; οὔ νύ τ' ἀοιδοὶ
αἴτιοι ἀλλά ποθι Ζεὺς αἴτιος, ὅς τε δίδωσιν
ἀνδράσιν ἀλφηστῇσιν, ὅπως ἐθέλῃσιν, ἑκάστῳ.
τούτῳ δ' οὐ νέμεσις Δαναῶν κακὸν, οἶτον ἀείδειν·
τὴν γὰρ ἀοιδὴν μᾶλλον ἐπικλείουσ' ἄνθρωποι,
ἥ τις ἀκουόντεσσι νεωτάτη ἀμφιπέληται.

Parse the words underlined above. Write a note on the meaning 3
of ἀλφηστῇσιν.

(c) ἱστὸν δ' εἰλάτινον κοίλης ἔντοσθε μεσόδμης
στῆσαν ἀείραντες, κατὰ δὲ προτόνοισιν ἔδησαν,
ἕλκον δ' ἱστία λευκὰ ἐυστρέπτοισι βοεῦσιν.

ἔπρησεν δ' ἄνεμος μέσον ἱστίον, ἀμφὶ δὲ κῦμα
στείρη πορφύρεον μεγάλ' ἴαχε νηὸς ἰούσης·
ἡ δ' ἔθεεν κατὰ κῦμα διαπρήσσουσα κέλευθον.

Write explanatory notes on the words underlined above.   4

2. Give a brief outline of the contents of Book I or II of the   4
Odyssey.

3. Translate into English :—   10

    (a) Οὕτω γὰρ, ὦ παῖ, χρὴ διὰ στέρνων ἔχειν,
        γνώμης πατρῴας πάντ' ὄπισθεν ἑστάναι.
        τούτου γὰρ οὕνεκ' ἄνδρες εὔχονται γονὰς
        κατηκόους φύσαντες ἐν δόμοις ἔχειν,
        ὡς καὶ τὸν ἐχθρὸν ἀνταμύνωνται κακοῖς,
        καὶ τὸν φίλον τιμῶσιν ἐξ ἴσου πατρί.
        ὅστις δ' ἀνωφέλητα φιτύει τέκνα,
        τί τόνδ' ἂν εἴποις ἄλλο πλὴν αὑτῷ πόνους
        φῦσαι, παλὺν δὲ τοῖσιν ἐχθροῖσιν γέλων ;

Write grammatical notes on the words underlined. Scan the first   5
line.

    (b) Πολλὰ τὰ δεινὰ κοὐδὲν ἀνθρώπου δεινότερον πέλει·
        τοῦτο γὰρ πολιοῦ πέραν πόντου χειμερίῳ νότῳ
        χωρεῖ, περιβρυχίοισιν
        περῶν ὑπ' οἴδμασιν,
        θεῶν τε τὰν ὑπερτάταν, Γᾶν
        ἄφθιτον, ἀκαμάταν ἀποτρύεται,
        ἰλλομένων ἀρότρων ἔτος εἰς ἔτος, ἱππείῳ γένει πολεύων.

4. Summarize critically the plot of the *Antigone.*   4

5. Write notes on, and translate :—   11

    (a) Οἴμοι ταλαίνης. ὡς ὑπερδέδοικά σου.

    (b) Μήτοι, κασιγνήτη, μ' ἀτιμάσῃς τὸ μὴ οὐ
        θανεῖν τε σὺν σοὶ τὸν θανόντα θ' ἁγνίσαι.

Scan the first line.

    (c) 'Αλλ' εἰ μὲν οὖν τάδ' ἐστίν ἐν θεοῖς καλά,
        παθόντες ἂν ξυγγνοῖμεν ἡμαρτηκότες.

6. What are the essential parts of a Greek play ? Illustrate from   5
the *Antigone.*

7. Translate into English :—   30

    (a) Οἴσω δὲ πένθος οὐκ ἐτήσιον τὸ σόν,
        ἀλλ' ἔστ' ἂν αἰὼν οὑμὸς ἀντέχῃ, γύναι,
        στυγῶν μὲν ἥ μ' ἔτικτεν, ἐχθαίρων δ' ἐμὸν
        πατέρα· λόγῳ γὰρ ἦσαν οὐκ ἔργῳ φίλοι.
        σὺ δ' ἀντιδοῦσα τῆς ἐμῆς τὰ φίλτατα
        ψυχῆς ἔσωσας. ἆρά μοι στένειν πάρα
        τοιᾶσδ' ἁμαρτάνοντι συζύγου σέθεν ;
        παύσω δὲ κώμους συμποτῶν θ' ὁμιλίας
        στεφάνους τε μοῦσάν θ' ἣ κατεῖχ' ἐμοὺς δόμους.

(b) Ηρ. Οἴμοι· πρὶν ὡς χρῆν σφ' ἐξ ἐμῆς θανεῖν χερός;

Υλ. κἂν σοῦ στραφείη θυμός, εἰ τὸ πᾶν μάθοις.

Ηρ. δεινοῦ λόγου κατῆρξας· εἰπὲ δ' ᾗ νοεῖς.

Υλ. ἅπαν τὸ χρῆμ', ἥμαρτε χρηστὰ μωμένη.

Ηρ χρήστ', ὦ κάκιστε, πατέρα σὸν κτείνασα δρᾷ;

Υλ. στέργημα γὰρ δοκοῦσα προσβαλεῖν σέθεν,
ἀπήμπλαχ', ὡς προσεῖδε τοὺς ἔνδον γάμους.

Ηρ. καὶ τίς ͵τοσοῦτο: φαρμακεὺς Τραχινίων;

Υλ. Νέσσος πάλαι Κένταυρος ἐξέπεισέ νιν
τοιῷδε φίλτρῳ τὸν σὸν ἐκμῆναι πόθον.

GREEK.

Second Pass Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English:—   17

(a) Ἦ καὶ δοκοῦσί σοι πάντες ἔχειν διδόναι λόγον περὶ τούτων ὧν ͵υνδὴ ἐλέγομεν;

Βουλοίμην μεντἄν, ἔφη ὁ Σιμμίας· ἀλλὰ πολὺ μᾶλλον φοβοῦμαι μὴ αὔριον τηνικάδε οὐκέτι ᾖ ἀνθρώπων οὐδεὶς ἀξίως οἷός τε τοῦτο ποιῆσαι.

Οὐκ ἄρα δοκοῦσί σοι ἐπίστασθαί γε, ἔφη, ὦ Σιμμία, πάντες αὐτά;

Οὐδαμῶς.

Ἀναμιμνήσκονται ἄρα ἅ ποτε ἔμαθαν;

Ἀνάγκη.

Πότε λαβοῦσαι αἱ ψυχαὶ ἡμῶν τὴν ἐπιστήμην αὐτῶν; οὐ γὰρ δὴ ἀφ' οὗ γε ἄνθρωποι γεγόναμεν.

Οὐ δῆτα.

Πρότερον ἄρα.

Ναί.

Ἦσαν ἄρα, ὦ Σιμμία, αἱ ψυχαὶ καὶ πρότερον, πρὶν εἶναι ἐν ἀνθρώπου εἴδει, χωρὶς σωμάτων, καὶ φρόνησιν εἶχον.

(b) Αἰσθάνῃ οὖν, ἦ δ' ὅς, ὅτι ταὐτά σοι συμβαίνει λέγειν, ὅταν φῇς μὲν εἶναι τὴν ψυχὴν πρὶν καὶ εἰς ἀνθρώπου εἶδός τε καὶ σῶμα ἀφικέσθαι, εἶναι δὲ αὐτὴν συγκειμένην ἐκ τῶν οὐδέπω ὄντων; οὐ γὰρ δὴ ἁρμονία γέ σοι τοιοῦτόν ἐστιν ᾧ ἀπεικάζεις, ἀλλὰ πρότερον καὶ ἡ λύρα καὶ αἱ χορδαὶ καὶ οἱ φθόγγοι ἔτι ἀνάρμοστοι ὄντες γίγνονται, τελευταῖον δὲ πάντων συνίσταται ἡ ἁρμονία καὶ πρῶτον ἀπόλλυται.

Write grammatical notes on ἦ δ' ὅς, and ᾧ ἀπεικάζεις.

(c) Τρίτος δὲ ποταμὸς τούτων κατὰ μέσον ἐκβάλλει, καὶ ἐγγὺς τῆς ἐκβολῆς ἐκπίπτει εἰς τόπον μέγα πυρὶ πολλῷ καόμενον, καὶ λίμνην ποιεῖ μείζω τῆς παρ' ἡμῖν θαλάττης, ζέουσαν ὕδατος καὶ πηλοῦ· ἐντεῦθεν δὲ χωρεῖ κύκλῳ θολερὸς καὶ πηλώδης, περιελιττόμενος δὲ τῇ γῇ ἄλλοσέ τε ἀφικνεῖται καὶ παρ' ἔσχατα τῆς Ἀχερουσιάδος λίμνης, οὐ συμμειγνύμενος τῷ ὕδατι· περιελιχθεὶς δὲ πολλάκις ὑπὸ γῆς ἐμβάλλει κατωτέρω τοῦ Ταρτάρου· οὗτος δ' ἐστὶν ὃν ἐπονομάζουσιν Πυριφλεγέθοντα, οὗ καὶ οἱ ῥύακες ἀποσπάσματα ἀναφυσῶσιν ὅπῃ ἂν τύχωσι τῆς γῆς.

Write a grammatical note on τοῦ Ταρτάρου and ἐκβάλλει.

2. *Either*, Discuss :—Ἡ μάθησις οὐκ ἄλλο τι ἢ ἀνάμνησις τυγχάνει οὖσα.   9

Or, How does Socrates regard the relation of the Soul and the Body ?

3. *Either*, Write a vivid account of Socrates' last day as it is   9
depicted in the *Phaedo*.

Or, Give a description of the earth and the fate of souls after death
as recorded in the closing sections.

4. Translate into English :—   12

(a) Πρῶτον μὲν οὖν οὐκ ἀθυμητέον ὦ ἄνδρες Ἀθηναῖοι τοῖς παροῦσι πράγμασιν, οὐδ' εἰ πάνυ φαύλως ἔχειν δοκεῖ. ὃ γάρ ἐστι χείριστον αὐτῶν ἐκ τοῦ παρεληλυθότος χρόνου, τοῦτο πρὸς τὰ μέλλοντα βέλτιστον ὑπάρχει. τί οὖν ἐστι τοῦτο; ὅτι οὐδὲν ὦ ἄνδρες Ἀθηναῖοι τῶν δεόντων ποιούντων ὑμῶν κακῶς τὰ πράγματα ἔχει· ἐπεί τοι, εἰ πάνθ' ἃ προσῆκε πραττόντων οὕτως εἶχεν, οὐδ' ἂν ἐλπὶς ἦν αὐτὰ ·βελτίω γενέσθαι.

Write a note on the syntax of the words underlined.   3

(b) Ἐκεῖνα μὲν ἅπαντα νόμῳ τέτακται, καὶ πρόοιδεν ἕκαστος ὑμῶν ἐκ πολλοῦ τίς χορηγὸς ἢ γυμνασίαρχος τῆς φυλῆς, πότε καὶ παρὰ τοῦ καὶ τί λαβόντα τί δεῖ ποιεῖν, οὐδὲν ἀνεξέταστον ·οὐδ' ἀόριστον ἐν τούτοις ἠμέληται, ἐν δὲ τοῖς περὶ τοῦ πολέμου καὶ τῇ τούτου παρασκευῇ ἄτακτα ἀδιόρθωτα ἀόριστα ἅπαντα. τοιγαροῦν ἅμα ἀκηκόαμέν τι καὶ τριηράρχους καθίσταμεν καὶ τούτοις ἀντιδόσεις ποιούμεθα καὶ περὶ χρημάτων πόρου σκοποῦμεν, καὶ μετὰ ταῦτα ἐμβαίνειν τοὺς μετοίκους ἔδοξε καὶ τοὺς χωρὶς οἰκοῦντας, εἶτ' αὐτοὺς πάλιν ἀντεμβιβάζειν, εἶτ' ἐν ὅσῳ ταῦτα μέλλεται, προαπόλωλε τὸ ἐφ' ὃ ἂν ἐκπλέωμεν· τὸν γὰρ τοῦ πράττειν χρόνον εἰς τὸ παρασκευάζεσθαι ἀναλίσκομεν, οἱ δὲ τῶν πραγμάτων καιροὶ οὐ μένουσι τὴν ἡμετέραν βραδυτῆτα καὶ εἰρωνείαν.

Write an explanatory note on the words underlined.   5

(c) Ἐγὼ τοίνυν ὦ ἄνδρες Ἀθηναῖοι λογίζομαι, τίνων ὁ Φίλιππος κύριος πρῶτον μετὰ τὴν εἰρήνην κατέστη; Πυλῶν καὶ τῶν ἐν Φωκεῦσι πραγμάτων. τί οὖν; πῶς τούτοις ἐχρήσατο; ἃ Θηβαίοις συμφέρει καὶ οὐχ ἃ τῇ πόλει, πράττειν προείλετο.

Explain the references.

(d) Καὶ τοῦθ' ὁρῶντες οἱ Ἕλληνες ἅπαντες καὶ ἀκούοντες, οὐ πέμπομεν πρέσβεις περὶ τούτων πρὸς ἀλλήλους κἀγανακτοῦμεν· οὕτω δὲ κακῶς διακείμεθα καὶ διορωρύγμεθα κατὰ πόλεις, ὥστ' ἄχρι τῆς τήμερον ἡμέρας οὐδὲν οὔτε τῶν συμφερόντων οὔτε τῶν δεόντων πρᾶξαι δυνάμεθα, οὐδὲ συστῆναι, οὐδὲ κοινωνίαν βοηθείας καὶ φιλίας οὐδεμίαν ποιήσασθαι, ἀλλὰ μείζω γιγνόμενον τὸν ἄνθρωπον περιορῶμεν, τὸν χρόνον κερδᾶναι τοῦτον ὃν ἄλλος ἀπόλλυται ἕκαστος ἐγνωκὼς (ὡς γ' ἐμοὶ δοκεῖ), οὐχ, ὅπως σωθήσεται τὰ τῶν Ἑλλήνων, σκοπῶν οὐδὲ πράττων· ἐπεί, ὅτι γ' ὥσπερ περίοδος ἢ καταβολὴ πυρετοῦ ἢ ἄλλου τινὸς κακοῦ καὶ τῷ πάνυ πόρρω δοκοῦντι νῦν ἀφεστάναι προσέρχεται, οὐδεὶς ἀγνοεῖ.

Write notes on the syntax of the words underlined. Comment on   5
the form διορωρύγμεθα. Explain the references.

5. *Either.* What were Demosthenes' proposals in the *First Philip-*   6
pic ?

Or, Give an outline of the events which occurred between the *First*
Philippic and the *Peace.*

6. Translate into English :—   30

(a) Τοῦ δ' ἐπιγιγνομένου χειμῶνος ἡ νόσος τὸ δεύτερον ἐπέπεσε τοῖς Ἀθηναίοις, ἐκλιποῦσα μὲν οὐδένα χρόνον τὸ παντάπασιν, ἐγένετο δέ τις ὅμως διοκωχή. παρέμεινε δὲ τὸ μὲν ὕστερον οὐκ ἔλασσον ἐνιαυτοῦ, τὸ δὲ πρότερον καὶ δύο ἔτη, ὥστε Ἀθηναίων γε μὴ εἶναι ὅτι μᾶλλον ἐκάκωσε τὴν δύναμιν. τετρακοσίων ὁπλιτῶν καὶ τετρακισχι- λίων οὐκ ἐλάσσους ἀπέθανον ἐκ τῶν τάξεων καὶ τριακοσίων ἱππέων, τοῦ δὲ ἄλλου ὄχλου ἀνεξεύρετος ἀριθμός. ἐγένοντο δὲ καὶ οἱ πολλοὶ τότε σεισμοὶ τῆς γῆς, ἔν τε Ἀθήναις καὶ ἐν Εὐβοίᾳ καὶ ἐν Βοιωτοῖς, καὶ μάλιστα ἐν Ὀρχομενῷ τῷ Βοιωτίῳ.

(b) Τὰ μὲν δὴ ῥηθέντα, ὦ Σώκρατες, ὑπὸ τοῦ παλαιοῦ Κριτίου κατ' ἀκοὴν τὴν Σόλωνος, ὡς συντόμως εἰπεῖν, ἀκήκοας· λέγοντος δὲ δὴ χθὲς σοῦ περὶ πολιτείας καὶ τῶν ἀνδρῶν οὓς ἔλεγες, ἐθαύμαζον ἀναμιμνησκόμενος αὐτὰ ἃ νῦν λέγω, κατανοῶν ὡς δαιμονίως ἔκ τινος τύχης οὐκ ἀπὸ σκοποῦ ξυνηνέχθης τὰ πολλὰ οἷς Σόλων εἶπεν. οὐ μὴν ἐβουλήθην παραχρῆμα εἰπεῖν· διὰ χρόνου γὰρ οὐχ ἱκανῶς ἐμεμνήμην. ἐνενόησα οὖν ὅτι χρεὼν εἴη μέ πρὸς ἐμαυτὸν πρῶτον ἱκανῶς πόντα ἀναλαβόντα λέγειν οὕτως.

GREEK.

Third Pass Paper.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

A. Composition.

Translate into Greek : —

1. If this be the case, ask yourselves this question, Will they be 25
content in such a state of slavery ? If not, look to the consequences.
Reflect how you are to govern a people, who think they ought to be free,
and think they are not. Your scheme yields no revenue ; it yields
nothing but discontent, disorder, disobedience ; and such is the state of
America, that after wading up to your eyes in blood, you could only
end just where you began, that is, to tax where no revenue is to be
found ; to—my voice fails me ; my inclination indeed carries me no
further—all is confusion beyond it.

2 Argyle's great error was that he did not resolutely refuse to 25
accept the name without the power of a general. Had he remained
quietly at his retreat in Friesland, he would in a few years have been
recalled with honour to his country. Had he conducted his expedi-
tion according to his own views, and carried with him no followers
but such as were prepared implicitly to obey all his orders, he might
possibly have effected something great. For what he wanted as a
captain seems to have been not courage nor activity, nor skill, but
simple authority. He should have known that of all wants' this is
the most fatal.

B. Grammar.

3. Conjugate in full the imperfect indicative active of εἰμι, and the 4
pluperfect indicative active of οἶδα.

4. Decline in full two of the following nouns :—πῆχυς,, ναῦς, and 4
βοῦς.

5. Give the principal parts of the following verbs, active and pas- 6
sive :—αἰρέω, ἀνοίγνυμι, ἀποκτείνω †ρέφω.

Either,

6. What are the chief uses of the accusative case ? Give examples. 6

Or,

Illustrate the different meanings and uses of the preposition παρά

C. Greek History.

Not more than THREE *questions to be attempted.*

7. Consider the influence of geographical conditions upon the his- 10
tory of Greece.

8. Describe the course of events in Greece between 499 and 478 B.C. 10

9. Write a short life of any *two* of the following :—Alcibiades, 10
Cimon, Demosthenes (General), Epaminondas, Lysander, Theramenes.

10. Describe the main features of Athenian life and thought in the age of Pericles.

·11. What do you know of any *four* of the following : — Eisphora,   10
Helots, Hypaspistae, Olympic Games, Phratries, Propylaea ?

12. Give an account of the Hegemony of Thebes.   10

FRENCH.

FIRST HONOURS PAPER.

Paper-setters $\left\{\begin{array}{l}\text{REV. FATHER E. FRANCOTTE, S.J.}\\ \text{T. S. STERLING, ESQ., M.A.}\\ \text{P. O. WHITLOCK, ESQ., B.A.}\end{array}\right.$

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. (*a*) Name the *three* elements of French Verse. Which is the French   5
Standard Metre ? Show clearly how you are to count the syllables
in the following line : —

     ' A vous de mépriser ce qu'un autre âge envie.'

(*b*) Point out, in any of the extracts of Question 2, a perfect rhyme,   3
an elision, a hiatus, an *enjambement*, and, in any of the proper lines,
the *caesura.*·

(*c*) What do you know about the *Lyric Stanza, Sonnet,* or *Ballade* ?   2
Is there any illustration of this in Question 2 ?

2. Translate *five* extracts out of the following : —   10

(*a*) C'est ainsi qu'achevait l'aveugle *en* soupirant,
     Et près des bois marchait, faible. et sur Une pierre
     S'asseyait. Trois pasteurs, enfants de cette terre,
     Le suivaient, accourus *aux* abois turbulents
     Des molosses, gardiens de leurs troupeaux *bêlants.*

               (*L'Aveugle,* by . . . . ?)

(*b*) Pauvres gens ! l'impôt nous dépouille :
     Nous n'avons, *accablés* de maux,
     Pour nous, ton *père* et six marmots,
     Rien *que* ta bêche et ma quenouille.
       Lève-toi, Jacques, lève-toi :
       Voici venir l'huissier du roi.

               Jacques, by . . . . ?)

(*c*) Quand ta voix céleste prélude
     Aux silences des belles nuits,
     Barde ailé de ma solitude,
     Tu ne sais pas que je *te* suis !
     Tu ne sais pas que mon oreille,
     Suspendue à ta douce voix,
     De l'harmonieuse *merveille*
     S'enivre *longtemps* sous les bois !

             (*Le Rossignol,* by . . . . ?)

(*d*) Or, le peuple attendait, et, craignant son courroux.
Priait *sans* regarder le Mont du Dieu jaloux ;
Car, s'il levait les yeux, les *flancs* noirs du nuage
Roulaient et redoublaient les *foudres* de l'orage
Et le feu des éclairs, aveuglant les regards,
Enchaînait tous les fronts courbés de toutes parts.
Bientôt le haut du Mont reparut sans Moïse.—
Il fut pleuré.—

<div align="right">(Moïse, by . . . . ?)</div>

(*e*) Donnez ! Il vient un jour où la terre nous laisse ;
Vos aumônes là-haut vous font *une* richesse,
Donnez, afin qu'on dise : 'Il a pitié de nous ! '
Afin que l'indigent *que* glacent les tempêtes,
Que le pauvre qui souffre à côté de vos fêtes,
Au seuil de vos palais fixe un œil moins jaloux.

<div align="center">(Les Feuilles d'automne : La Charitè, by . .</div>

(*f*) *Je voudrais* vivre, aimer, m'accoutumer aux hommes,
Chercher un peu de joie et n'y pas trop compter,
Faire ce qu'on a fait, être ce que nous *sommes*,
Et regarder le ciel sans m'en inquiéter.
Je ne *puis*. Malgré moi l'infini me tourmente.
Je n'y saurais songer sans crainte et sans espoir.

<div align="center">(L'Espoir en Dieu, by . .</div>

(*g*) A l'âge où nous errions, *livre en main*, sous la haie,
Tout prêts à dépenser notre cœur et nos jours,
On dit que vous savez ce que vaut *en* monnaie
L'heureux temps des chansons, des songes, des amours.

<div align="center">. . . . . .</div>

Plus haut dans le mépris des faux biens qu'on adore,
Plus haut dans ces combats *dont* le ciel est l'enjeu,
plus haut dans vos amours. Montez, montez encore
Sur cette échelle d'or qui va se perdre en Dieu.

<div align="right">(A la Jeunesse, by . . . . ?)</div>

3. (*a*) N.B.—*Mention the authors of only* FIVE *of the above extracts.* 6
Give a short biography of two of them, with a list of their chief literary productions.

(*b*) Who is *l'aveugle* mentioned in 2, *a* ? Write short notes on :— 4
molosses (2, *a*), *Mont* (2, *d*). Who was *E'picure*, alluded to in *L'Espoir en Dieu* (2, *f*) ?

(*c*) What do you know about the following :—Œdipe, les paladins, 4
le cirque de Marboré, troubadours, Obéron, basquine, Messidor, hécatombes ?

4. (*a*) Parse *six* of the words or phrases *italicised* in Question 2. 6
(*b*) Comment on the gender of :—*gens, foudre.* 1
(*c*) Account for the plural *silences* (2, *c*). 6
(*d*) Give the principal parts of *s'asseyait* (also conjugate the verb 1
in the imperative mood) and *venir* (conjugate the pluperfect subjunctive).

(*e*) Give two meanings of *bois* and *achever* ; and distinguish between 2
merveille and *vermeille, courroux* and *colère.*

(*f*) Write out synonyms for :—*barde* (2, *c*); *flancs* (2, *d*); *laisse* 1
(2, *e*).

(*g*) Give a noun corresponding to *soupirant* (2, *a*), and a verb cor-   1
responding to *abois* (2, *a*).

5. Translate *two* of the following passages :—   8

    (*a*) *Cyrano*, Que l'instant entre tous les instants soit béni,
> Où cessant d'oublier qu'humblement je repose,
> Vous venez jusqu'ici pour me dire . . . me dire ? . . .

Roxane, qui s'est démasquée. Mais tout d'abord, merci, car ce drôle, ce fat
> Qu'au brave jeu d'épée, hier, vous avez fait mal,
> C'est lui qu'un grand seigneur . . . épris de moi . . .

Cyrano.   De Guiche !
Roxane, baissant les yeux. Cherchait à m'imposer . . . comme mari . . .

    (*b*) *Roxane.* Mais il faut qu'on serve et découpe, et dé sosse
> Regardez mon cocher d'un peu plus près, messieurs,
> Et vous reconnaîtrez un homme précieux :
> Chaque sauce sera, si l'on veut, réchauffée !

Les cadets ,se ruant sur le carrosse. C'est Ragueneau !
Acclamations. Oh ! Oh !
Roxane, les suivant des yeux. Pauvres gens !
Cyrano, lui baisant la main.   Bonne fée !
*Ragueneau debout sur le siége comme un charlatan en place publi-
que.* Messieurs !
   . . . (*Enthousiasme.*)

Les cadets. Bravo ! Bravo !

    (*c*) *Cyrano, de plus en plus pâle et luttant contre la douleur.*
                  Samedi, dix-neuf.

> Ayant mangé huit fois du raisiné de Cette,
> Le roi fut pris de fièvre ; à deux coups de lancette
> Son mal fut condamné pour lèse-majesté.
> Et cet auguste pouls n'a plus fébricité !
> Au grand, chez la reine, on a brûlé, dimanche,
> Sept cent soixante-trois flambeaux de cire blanche ;
> Nos troupes ont battu, dit-on, Jean l'Autrichien ;
> On a pendu quatre sorciers : . . .

6. (*a*) To what School does Rostand belong ?   What do you think of   5
the merits and demerits of his drama *Cyrano de Bergerac* ?   Give reasons
for your answer.   Point out in the above some very poor lines.

    (*b*) Account for the exclamation ' pauvres gens ! ' in connection   1
with facts before related (5, *b*)

7. (*a*) When does *cent* take the mark of the plural ?   Contrast with   1
5, *c, third line from the end.*

    (*b*) Distinguish between *béni* and *bénit* (5, *a*); *troupe, troupes*   1
(5, *c*).

    (*c*) Conjugate *il faut* (5, *b*) in all its moods and tenses.   2

8.   Translate into idiomatic English *two* of the following passages :—   30

    (*a*) *Polyeucte.* Je considère plus ; je sais mes avantages,
> Et l'espoir que sur eux forment les grands courages :
> Ils n'aspirent enfin qu'à des biens passagers,
> Que troublent les soucis, que suivent les dangers :
> La mort nous le ravit, la fortune s'en joue ;
> Aujourd'hui sur le trône, et demain dans la boue ;
> Et leur plus haut éclat fait tant de mécontents,
> Que peu de vos Césars en ont joui longtemps.

(b) *Sosie.*	Parmi tout le butin fait sur nos ennemis,
	Qu'est ce qu'Amphitryon obtint pour son **partage** ?
Mercure.	Cinq fort gros diamants, en nœud proprement mis,
	Dont leur chef se parait comme d'un rare ouvrage.
Sosie	A qui destine t-il un si riche présent ?
Mercure.	A sa femme ; et sur elle il le veut voir paraître.
Sosie.	Mais où, pour l'apporter, est-il mis à présent ?
Mercure.	Dans un coffret, scellé, des armes de mon maître.

(c)   Tu n'as pas d'ailes, et tu veux voler ! Rampe !
                     — Hélas, monsieur, déjà je rampe assez,
                     Ce fol espoir qu'un moment a fait naître,
                     Ces vains désirs sont pour jamais passés :
                     Avec mon bien j'ai vu périr mon être,
                     Né malheureux, de la crasse tiré,
                     Et dans la crasse en un moment rentré.
                     A tous emplois on me ferme la porte.

FRENCH.

SECOND HONOURS PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1.   Translate into English *two* of the following passages : —   12

    (a) ' Tous les hommes domiciliés dans l'enceinte du mur de ville et dans les faubourgs, de quelque seigneur que relève le terrain où ils habitent, jureront la commune. Dans toute l'étendue de la ville, chacun prêtera secours aux autres loyalement et selon son pouvoir.

    ' Les pairs de la commune jureront de ne favoriser personne pour cause d'amitié, de ne léser personne pour cause d'inimitié, et de donner en toute chose, selon leur pouvoir, une décision équitable. Tous les autres jureront d'obéir et de prêter main-forte aux décisions des pairs.

    ' Quiconque aura forfait envers un homme qui aura juré cette commune, les pairs de la commune, si plainte leur en est faite, feront justice du corps et des biens du coupable, suivant leur délibération.'

    (b) On montre aujourd'hui à Toulouse, dans la salle gothique où délibéraient les capitouls, le large sabre qui jadis fut, pour ces magistrats, l'équivalent des haches consulaires. C'est un cimeterre échancré vers la pointe, à poignée d'acier, sans garde, et d'un aspect vraiment imposant. La croyance populaire veut que cet instrument ait été fabriqué exprès pour le supplice du maréchal de Montmorency, en l'année 1632 ; mais quiconque l'examine avec un peu d'attention reconnaît que c'est une arme de parade, incapable d'avoir jamais tranché une tête, à cause d'un cordon en saillie qui garnit et décore le dos de la lame.

    (c) Un des religieux, inspectant à cheval les propriétés de l'abbaye, rencontra un homme qui coupait du bois dans une réserve ; il voulut lui enlever sa cognée pour gage de l'amende, mais cet homme le frappa violemment et le renversa de cheval. Des serviteurs de

26

l'abbaye s'emparèrent du coupable, que eut les yeux crevés par vengeance et sans aucun jugement. A cette nouvelle, qui fit grand bruit. le *comte de Nevers* éprouva ou feignit d'éprouver beaucoup d'indignation ; il s'emporta contre les moines, les accusant à la fois de cruauté, d'iniquité et d'attentat contre ses propres droits comme seigneur haut justicier.

2. What is the meaning of the following words and phrases :—   10
lèse-majesté ; *homme-lige* ; *tiers-état* ; *taille* ; *banlieue* ; *échevin* ; *ils donneront au roi trois gîtes par an* ; *mandat de comparution* ; *on criait Haro as clercs* ; *la mainmorte.*   *Either,*

3. What do you know of *levêque Gaudri* and the manner of his   7
death ?   *Or,*

State briefly under what circumstances Reims received its charter.

4. Account for the form of the past participle in the following   6
sentences :—

    (*a*) Vous excédez les bornes de la commune de Laon qui vous a été *donnée* pour modèle.

    (*b*) Il ne faut point recevoir dans la ville les personnes qu'il aura *b annies.*

    (*c*) Au moment où l'action révolutionnaire est *parvenue* au dernier degré de violence, la réaction arrive.

5. Translate *two* of the following passages :—   12

    (*a*) Après sa vigne de Château-Neuf, ce que le pape aimait le plus au monde, c'était sa mule. Le bonhomme en raffolait de cette bête-là. Tous les soirs avant de se coucher il allait voir si son écurie était bien fermée, si rien ne manquait dans sa mangeoire, et jamais il ne se serait levé de table sans faire préparer sous ses yeux un grand bol du vin à la française avec beaucoup de sucre et d'aromates, qu'il allait lui porter lui-même, malgré les observations de ses cardinaux . . . Il faut dire aussi que la bête en valait la peine. C'était une belle mule noire mouchetée de rouge, le pied sûr, le poil luisant, la croupe large et pleine, portant fièrement sa petite tête sèche toute harnachée de pompons, de nœuds, de grelots d'argent, de bouffettes.

    (*b*) Quand le mistral ou la tramontane ne soufflaient pas trop fort, je venais me mettre, entre deux roches au ras de l'eau, au milieu des goélands, des merles, des hirondelles, et j'y restais presque tout le jour dans cette espèce de stupeur et d'accablement délicieux que donne la contemplation de la mer. Vous connaissez, n'est-ce pas, cette jolie griserie de l'âme ? On ne pense pas, on ne rêve pas non plus. Tout votre être vous échappe, s'envole s'éparpille. On est la mouette qui plonge, la poussière d'écume qui flotte au soleil entre deux vagues, la fumée blanche de ce paquebot qui s'éloigne, ce petit corailleur à voile rouge, cette perle d'eau, ce flocon de brume, tout excepté soi-même.

    (*c*) Dans le calme et le demi-jour d'une petite chambre un bon vieux à pommettes roses, ridé jusqu'au bout des doigts, dormait au fond d'un fauteuil, la bouche ouverte, les mains sur ses genoux. À ses pieds une fillette habillée de bleu,—grande pèlerine et petit béguin, le costume des orphelines,—lisait la Vie de saint Irénée dans un livre plus gros qu'elle . . . Cette lecture miraculeuse avait opéré sur toute la maison. Le vieux dormait dans son fauteuil, les mouches au plafond, les canaris dans leur cage, là-bas sur la fenêtre. La grosse horloge ronflait, tic tac, tic tac. Il n'y avait d'éveillé dans toute la chambre qu'une grande bande de lumière qui tombait droite et blanche

entre les volets clos, pleines d'étincelles vivantes et de valses micro-scopiques.

Either,

6. Write a short appreciative criticism of *Les Vieux*, bringing out   8
Daudet's charm and grace as a writer.

Or,

Tell the story of the loss of the *Sémillante.*

7. Give the French equivalents for the following phrases :—to go   10
barefoot ; from top to bottom ; in the open sea ; to shake one's head ;
in a low voice ; how bald he is ! ; I am mistaken ; are you not ash-
amed ? ; it is not worth while ; that does not matter.

8. Form adverbs from the following adjectives :—*prudent, lent,*   5
énorme, impuni, affreux.

9. Translate *two* of the following passages :—   30

(*a*) Quelle opposition entre notre littérature du douzième siècle
et celle des nations voisines ! Quel contraste entre nos fabliaux, nos
romans du Renard et de la Rose, nos chansons de Gestes, et les Nibe-
lungen, le Romancero, Dante et les vieux poëmes saxons ! Au lieu
des grandes conceptions tragiques, des rêveries sentimentales et volup-
tueuses, des générosités et des tendresses du vieux poëme allemand ;
au lieu de l'âpreté pittoresque, de l'éclat, de l'action, du nerf des
récits espagnols ; au lieu de la farouche énergie, de la profondeur
lugubre des hymnes saxonnes, vous rencontrez des épopées prosaïques
et des contes frondeurs. Leur style n'a pas de couleur et ne donne
pas de secousses. Les subites et éclatantes visions, les violentes ac-
cumulations de sentiments concentrés ou épanchés, toute passion,
toute splendeur y manque. Ils écrivent sans images ni figures, aisé-
ment, tranquillement, avec la suite d'une eau claire et coulante. Ils
trouvent à l'instant et sans effort l'expression juste et atteignent du
premier coup l'objet en lui-même, sans s'empêtrer dans le magnifique
manteau des métaphores, sans être troublé par l'afflux trop grand des
émotions. Bien plus, ils voient aussi nettement les liaisons des choses
que les choses elles-mêmes.   TAINE

(*b*) Il ne suffit pas pour le progrès de l'esprit humain que quelques
penseurs isolés arrivent à des points de vue fort avancés, et que quel-
ques têtes s'élèvent comme des folles avoines au-dessus du niveau
commun. Que sert une magnifique découverte, si tout au plus une
centaine de personnes en profitent ? En quoi l'humanité est-elle plus
avancée, si sept ou huit personnes ont aperçu, la haute raison des
choses ? Un résultat n'est acquis que quand il est entré dans la
grande circulation. Or les résultats de la haute science ne sont pas de
ceux qu'il suffit d'énoncer. Il faut y élever les esprits. Kant et
Hegel auraient beau avoir raison ; leur science, dans l'état actuel, de-
meurerait incommunicable. Serait-ce leur faute ? Non ; ce serait la
faute des barbares qui ne les peuvent comprendre, ou plutôt la faute de
la société qui suppose fatalement des barbares. Une civilisation n'est
réellement forte que quand elle a une base étendue. L'antiquité eut
des penseurs presque aussi avancés que les nôtres ; et pourtant la civili-
sation antique périt par sa paucité, sous la multitude des barbares.
Elle ne portait pas sur assez d'hommes ; elle a disparu, non faute
d'intensité, mais faute d'extension.   RENAN.

(*c*) A la sueur de ton visaige
    Tu gagnerois ta pauvre vie,
  Après long travail et usaige,
    Voicy la mort qui te convie.

Le quatrain en vieux français, placé au-dessous d'une composition d'Holbein, est d'une tristesse profonde dans sa naïveté. La gravure représente un laboureur conduisant sa charrue au milieu d'un champ. Une vaste campagne s'étend au loin, on y voit de pauvres cabanes ; le soleil se cache derrière la colline. C'est la fin d'une rude journée de travail. Le paysan est vieux, trapu, couvert de haillons. L'attelage de quatre chevaux qu'il pousse en avant est maigre, exténué ; le soc s'enfonce dans un fond raboteux et rebelle. Un seul être est allègre et ingambe dans cette scène de 'sueur et usaige.' C'est un personnage fantastique, un squelette armé d'un fouet, qui court dans le sillon à côté des chevaux effrayés et les frappe, servant ainsi de valet de charrue au vieux laboureur. C'est la mort, ce spectre qu'Holbein a introduit allégoriquement dans la succession de sujets philosophiques et religieux, à la fois lugubres et bouffons, intitulée les Simulacres de la mort.

<div style="text-align:right">G. SAND.</div>

FRENCH.

THIRD HONOURS PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *five* extracts (*three* of Prose and *two* of Poetry) from among the following :—

(*a*) <div style="text-align:center">*Dover Beach.*</div>

> The sea is calm to-night,
> The tide is full, the moon lies fair
> Upon the Straits ;—on the French coast the light
> Gleams and is gone ; the cliffs of England stand,
> Glimmering and vast, out in the tranquil bay,
> Come to the window, sweet is the night air '

(*b*) <div style="text-align:center">*L'Allegro.*</div>

> Sometimes with secure delight
> The upland hamlets will invite,
> When the merry bells ring round,
> And the jocund rebecks sound
> To many a youth and many a maid
> Dancing in the checquered shade ; . . .

(*c*) <div style="text-align:center">*To blossoms.*</div>

> Fair pledges of a fruitful tree,
> Why do ye fall so fast ?
> Your date is not so past,
> But you may stay yet here a while
> To blush and gently smile
> And go at last.

(*d*) <div style="text-align:center">*Mrs. Battle's opinions on Whist.*</div>

To those puny objectors against cards, as nurturing the bad passions, she would retort, that man is a gaming animal. He must be

always trying to get the better in something or other :—that this passion can scarcely be more safely expended than upon a game at cards ; that cards are a temporary illusion ; in truth, a mere drama ; for we do but *play* at being mightily concerned, where a few idle shillings are at stake, yet, during the illusion, we *are* as mightily concerned as those whose stake is crowns and kingdoms.

(e)   *A hunting scene with Sir Roger.*

After we had rid about a mile from home, we came upon a large heath, and the sportsmen began to beat. They had done so for some time, when, as I was at a little distance from the rest of the company, I saw a hare pop out from a small furze-brake (*buisson de bruyères*) almost under my horse's feet. I marked the way she took, which I endeavoured to make the company sensible of by extending my arm ; but to no purpose, till Sir Roger, who knows that none of my extraordinary motions are insignificant, rode up to me, and asked me, if Puss had gone that way ?

(f)   *Rejoicings upon the New Year's coming of age.*

The Old Year being dead, and the New Year coming of age, which he does, by Calendar Law, as soon as the breath is out of the old gentleman's body, nothing would serve the young spark but he must give a dinner upon the occasion, to which all the Days of the year were invited. The Festivals, whom he deputed as his stewards, were mightily taken with the notion. They had been engaged time out of mind, they said, in providing mirth and good cheer for mortals below ; and it was time they should have a taste of their own bounty. It was stiffly debated among them whether the *Fasts* should be admitted.

(g)   *Fashionable affectations.*   •

About five years ago, I remember, it was the fashion to be short-sighted. A man would not own an acquaintance until he had first examined him with his glass. At a lady's entrance into the play-house, you might see the tubes immediately levelled at her from every quarter of the pit and side-boxes. However, that mode of infirmity is out, and the age has recovered its sight : but the blind seemed to be succeeded by the lame, and a jaunty limp is the present beauty. I think I have formerly observed, a cane is part of the dress of a prig (*fat*), and always worn upon a button, . . .

2.   *Either,*

(a) Give rules for the use of the French article.

Translate the following :—   *Or,*

War is a scourge. London is the capital of England. The statue of our late Queen is on view. The wise and pious Fénelon. This costs five shillings a dozen. I am learning Geography every day. Many nations are at war.

(b) Name six classes of nouns that are never used in the singular. **4**
Give one example of each class. Write out six nouns that are not used in the plural.

(c) Correct and justify your correction in the following :—une   **2**
livre (lb.) et demi, la feu reine, les yeux et la bouche ouverte.

(d) Distinguish between —*un grand homme* and *un homme grand*, **2**
un étudiant pauvre and *un pauvre étudiant.*

(e) Comment on the use of the indefinite pronouns *on*, *chacun*. **3**

(*f*) Is the proper *tense* used in the following sentences :—Quand il   2
eut fini, je le remerciais ; Quand il avait tué son père, il fallut le mettre
à mort ?   Explain and translate.

(*g*) When is the subjunctive used in French ?   Frame short sen-   3
tences in illustration.

3. (*a*) When did the Franks conquer Gaul ?   In whose power had it   3
been before ?

(*b*) Give the boundaries of the Empire of Charlemagne at the time   3
of its greatest extent.

(*c*) Who ruled over France at the time of the Second Crusade ?   6
Who was St. Bernard ?   Give some details of the conflict.   What was
the issue of the Crusade ?

(*d*) Name the kings of France between Francis I (*give date*) and   8
Louis XVI (*give date*).

(*e*) Relate briefly the chief events of the First French Revolu-   10
tion, in chronological order.

FRENCH.

FOURTH HONOURS PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1.   Translate into English *two* of the following passages :—   12

(*a*)   . ARN. Peut-être. Mais enfin contez-moi cette histoire.
       AG. Elle est fort étonnante, et difficile à croire.
J'étais sur le balcon à travailler au frais,
Lorsque je vis passer sous les arbres d'auprès
Un jeune homme bien fait, qui rencontrant ma vue,
D'une humble révérence aussitôt me salue :
Moi, pour ne point manquer à la civilité,
Je fis la révérence aussi de mon côté.
Soudain il me refait une autre révérence :
Moi, j'en refais de même une autre en diligence :
Et lui d'une troisième aussitôt repartant,
D'une troisième aussi j'y repars'à l'instant.
Il passe, vient, repasse, et toujours de plus belle
Me fait à chaque fois révérence nouvelle.

(*b*)   ARN. (*assis*). Agnès, pour m'écouter, laissez là votre ouv-
         rage.
Levez un peu la tête et tournez le visage :
Là regardez-moi là durant cet entretien
Et jusqu'au moindre mot imprimez-le-vous bien.
Je vous épouse, Agnès ; et cent fois la journée
Vous devez bénir l'heur de votre destinée,
Contempler la bassesse où vous avez été
Et dans le même temps admirer ma bonté,
Qui de ce vil état de pauvre villageoise
Vous fait monter au rang d'honorable bourgeoise
Et jouir de la couche et des embrassements
D'un homme qui fuyait tous ces engagements,
Et dont à vingt partis, fort capables de plaire,
La cœur a refusé l'honneur qu'il vous veut faire.

(c)   Hor. La place m'est heureuse à vous y rencontrer.
Je viens de l'échapper bien belle, je vous jure.
An sortir d'avec vous, sans prévoir l'aventure,
Seule dans son balcon j'ai vu paraître Agnès,
Qui des arbres prochains prenait un peu le frais.
Après m'avoir fait signe, elle a su faire en sorte,
Descendant au jardin, de m'en ouvrir la porte ;
Mais à peine tous deux dans sa chambre étions-nous,
Qu'elle a sur les degrés entendu son jaloux ;
Et tout ce qu'elle a pu dans un tel accessoire,
C'est de me renfermer dans une grande armoire.
Il est entré d'abord : je ne le voyais pas,
Mais je l'oyais marcher, sans rien dire, à grands pas,
Poussant de temps en temps des soupirs pitoyables,
Et donnant quelquefois de grands coups sur les tables.

Either,

2.   Write a short account of the *dénouement* of *L'E'cole des Femmes.*

Or,

Give some account of the measure of success achieved by *L'E'cole
des Femmes* on its first presentation.   Who played the leading part ?

3.   Scan the first six lines of Extract 1 (b).   6
4.   Annotate the following words used by Molière :—*choir, nenni,*   8
ouir, (je) voi, ladite, las ! (je) connoi, jusques.

5.   Translate *two* of the following passages :—   12

(a)   *Don Alonse.*

Sire, le Comte est mort :
Don Diègue, par son fils, a vengé son offense.

Don Fernand.

Dès que j'ai su l'affront, j'ai prévu la vengeance ;
Et j'ai voulu dès lors prévenir ce malheur.

Don Alonse.

Chimène à vos genoux apporte sa douleur ;
Elle vient tout en pleurs vous demander justice.

Don Fernand.

Bien qu'à ses déplaisirs mon âme compatisse,
Ce que le Comte a fait semble avoir mérité
Ce digne châtiment de sa témérité.
Quel ue juste pourtant que puisse être sa peine,
Je ne puis sans regret perdre un tel capitaine.

(b)   Sous moi donc cette troupe s'avance,
Et porte sur le front une mâle assurance.
Nous partîmes cinq cents ; mais par un prompt renfort
Nous nous vîm s trois mille en arrivant au port,
Tant, à nous voir marcher avec un tel visage,
Les plus épouvantés reprenoient de courage !
J'en cache les deux tiers, aussitôt qu'arrivés,
Dans le fond des vaisseaux que lors furent trouvés ;
Le reste, dont le nombre augmentoit à toute heure,
Brûlant d'impatience autour de moi demeure,
Se couche contre terre, et, san faire aucun bruit,
Passe une bonne part d'une si belle nuit.

(c)
Don Sanche.

De grâce, acceptez mon service,

Chimène.

J'offenserois le Roi, qui m'a promis justice.

Don Sanche.

Vous savez qu'elle marche avec tant de langueur,
Qu'assez souvent le crime échappe à sa longueur :
Son cours lent et douteux fait trop perdre de larmes.
Souffrez qu'un cavalier vous venge par les armes :
La voie en est sûre, et plus prompte à punir.

Chimène.

C'est le dernier remède ; et s'il y faut venir,
Et que de mes malheurs cette pitié vous dure,
Vous serez libre alors de venger mon injure.

Don Sanche.

C'est l'unique bonheur où mon âme prétend ;
Et pouvant l'espérer, je m'en vais trop content.

6.　‘ Corneille's heroes are mere abstractions and psychologically　10
unreal.’　Discuss this statement with special reference to the *Cid.*

7.　Why did Richelieu side with the rivals of Corneille in denouncing　8
the *Cid* ?

8.　Account for the *ne* in the following sentence :—' Ton honneur　6
t'est plus cher que je *ne* te suis chère.'　After what verbs may *pas* be
omitted as the second part of the negative ?

9.　Translate into French the following passages :—　　　　　　　　30

(a) It happened one day, about noon, going towards my boat, I
was exceedingly surprised with the print of a man's naked foot on the
shore, which was very plain to be seen in the sand.　I stood like one
thunderstruck, or as if I had seen an apparition ; I listened, I looked
round me, but I could hear nothing nor see anything ; I went up to a
rising ground to look further ; I went up the shore and down the shore,
but it was all one, I could see no other impression but that one.　I
went to it again to see if there were any more, and to observe if it
might not be my fancy ; but there was no room for that, for there
was exactly the very print of a foot—toes, heel, and every part of a
foot.　　　　　　　　　　　　　　　　　　　　　　　　　　DEFOE.

(b) My friend Sir Roger has often told me, with a good deal of
mirth, that at his first coming to his estate he found three parts of his
house altogether useless : that the best room in it had the reputation
of being haunted, and by that means was locked up : that noises had
been heard in his long gallery, so that he could not get a servant to
enter it after eight o'clock at night ; that the door of one of his cham-
ber was nailed up, because there went a story in the family that a
butler had formerly hanged himself in it ; and that his mother, who
had lived to a great age, had shut up half the rooms in the house, in
which either her husband, a son, or a daugther had died.　ADDISON.

FRENCH.

FIFTH HONOURS PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *five* of the following passages:—   25

(*a*) Quiconque a jeté une pierre dans une mare à grenouilles ou tiré un coup de fusil dans une volée d'oiseaux peut se faire une idée de l'effet que produisirent ces paroles incongrues, au milieu de l'attention générale. Gringoire en tressaillit comme d'une secousse électrique. Le prologue resta court, et toutes les têtes se retournèrent en tumulte vers le mendiant, qui, loin de se déconcerter, vit dans cet incident une bonne occasion de récolte.

(*b*) 'Ah! c'est toi, maître! dit Clopin. J'y étais, par la tête-Dieu! Eh bien! camarade, est-ce une raison, parce que tu nous as ennuyés ce matin, pour ne pas être pendu ce soir?' 'J'aurai de la peine à m'en tirer,' pensa Gringoire. Il tenta pourtant encore un effort. 'Je ne vois pas pourquoi, dit-il, les poètes ne sont pas rangés parmi les truands. Vagabond, Æsopus le fut; mendiant, Homerus le fut.'

(*c*) 'Vous trouvez, compère Coictier?' dit le compagnon. Cette parole, prononcée du ton de la surprise et du reproche, ramena sur ce personnage inconnu l'attention de l'archidiacre, qui, à vrai dire, ne s'en était pas complètement détourné un seul moment depuis que cet étranger avait franchi le seuil de la cellule. Il avait même fallu les mille raisons qu'il avait de ménager le docteur Jacques Coictier, le tout-puissant médecin du roi Louis XI, pour qu'il le reçût ainsi accompagné.

(*d*) Dom Claude fit un geste d'impatience. 'Je ne vous parle pas de cela, maître Jacques Charmolue, mais du procès de votre magicien. N'est-ce pas Marc Cenaine, que vous le nommez, le sommelier de la cour des comptes? Avoue-t-il sa magie? La question vous a-t-elle réussi?'

'Hélas non, répondit maître Jacques, toujours avec son sourire triste. Nous n'avons pas cette consolation. Cet homme est un caillou.'

(*e*) E'perdu, il ne sut où il allait. Au bout de quelques pas il se trouva sur le pont Saint-Michel. Il y avait une lumière à une fenêtre d'un rez-de-chaussée. Il s'approcha. A travers un vitrage fêlé il vit une salle sordide, qui réveilla un souvenir confus dans son esprit. Dans cette salle, mal éclairée d'une lampe maigre, il y avait un jeune homme blond et frais, à figure joyeuse, qui embrassait, avec de grands éclats de rire, une jeune fille fort effrontément parée.

(*f*) 'Vous êtes pathétique, dit-il en essuyant une larme. — Eh bien! j'y réfléchirai. — C'est une drôle d'idée que vous avez eue là. — Après tout, poursuivit-il après un silence, qui sait? peut-être ne me pendront-ils-pas. N'épouse pas toujours qui fiance. Quand ils me trouveront dans cette logette, si grotesquement affublé, en jupe et en coiffe, peut-être éclateront-ils de rire. — Et puis, s'ils me pendent, eh bien! la corde, c'est une mort comme une autre, ou, pour mieux dire, ce n'est pas une mort comme une autre.'

Either,

2.　Write a criticism of *Noitre-Dame de Paris* as a historical romance.　12

Or,

Say what you know about Victor Hugo as a romanticist.

3.　Give a character-sketch of *one* of the following personages :—　　.　9

　(*a*) Dom Claude.
　(*b*) Gringoire.
　(*c*) Charmolue.

4.　In what ways may the English passive be rendered in French ?　　6

5.　Account for the mood of the words italicized in *three* of the fol-　12
lowing sentences :—

　(*a*) Mon père exige que je lui *renvoie* tout l'argent qu'il m'a donné.
　(*b*) Je ne croyais pas que le roi *vînt*.
　(*c*) Il n'y en a pas un seul qui *réponde*.
　(*d*) Le général défendit qu'aucun soldat *entrât* dans la ville.

Either,

6.　Frame sentences to show the various uses of *même* and *aucun*.　　6

Or,

Frame sentences showing how *tout* may be used as an adjective,
a pronoun, a substantive, and an adverb.

7.　Translate into French :—　　　　　　　　　　　　　　　　30

　(*a*) My masters, I am a very bad orator, for my bringing up hath
not been in learning, but what so I shall here speak let every man take
notice of what I shall say, and let him write it down if he list, for I
will speak nothing, but I will answer it in England, yea, and before
her Majesty, and I have it here already set down. Thus it is, my mas-
ters, that we are very far from our country and friends, we are
compassed in on every side with our enemies, wherefore we are not
to make small reckoning of a man, for we cannot have a man if we
would give for him ten thousand pounds. Wherefore we must have
these mutinies and discords, that are grown amongst us, redressed,
for it doth even take my wits from me to think of it.

　(*b*) Caius Marcius was a noble Roman, of the race of that worthy
king, Ancus Marcius; his father died when he was a child, but his
mother, whose name was Volumnia, performed to him the part both
of father and mother ; Caius loved her exceedingly, and when he gained
glory by his feats of arms it was his greatest joy that his mother should
hear his praises ; and when he was rewarded for his noble deeds it
was his greatest joy that his mother should see him receive his crown.

FRENCH.

Sixth Honours Paper.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Section A.

1. Translate into English :—   40

(a) On affecte souvent de mépriser cette partie du travail qui consiste à disposer ses idées et à marquer d'avance tous les points de la route où l'on doit passer. Métier de manœuvre, dit on : cette patiente régularité est l'œuvre d'un génie médiocre. Les grands esprits, qui prennent les choses en haut, n'ont qu'à se lancer, portés au but par le droit jet de l'inspiration. C'est là le langage de la paresse qui fuit la peine, ou de l'orgueil qui la dissimule. Tout ce qu'on prétend laisser à l'inspiration, on le livre au hasard.

(b) Le sage ne fait pas le fier. Une fourmi
Travaille plus avec sa routine ordinaire
Et son bon sens, qu'avec son vacarme en tonnerre.
L'homme est l'homme ; il n'est pas méchant, il n'est pas bon.
Blanc comme neige, point, noir comme le charbon,
Non. Blanc et noir, mêlé, tigré, douteux, sceptique.
Tout homme médiocre est homme politique.
Cherchons, non la grandeur, mais la proportion
Agir comme Aristide et comme Phocion,
Être héroïque, épique et beau, mauvaise affaire.

(c) 'Qui dit *auteur* dit *oseur*,' c'est un mot de Beaumarchais, et nul n'a plus justifié que lui cette définition. En mêlant au vieil esprit gaulois les goûts du moment, un peu de Rabelais et de Voltaire, en y jetant un léger déguisement espagnol et quelques rayons du soleil de l'Andalousie il a su être le plus réjouissant et le plus remuant Parisien de son temps, le Gil Blas de l'époque encyclopédique, à la veille de l'époque révolutionnaire ; il a redonné cours à toutes sortes de vieilles vérités d'expérience ou de vieilles satires, en les rajeunissant. Il a refrappé bon nombre de proverbes qui étaient près de s'user.

(d) Dans notre âge de science et d'industrie, l'appétit de l'au-delà subsiste toujours. Il se fait seulement plus rare et plus morbide par sa difficulté à se satisfaire. Le signe le plus extraordinaire de l'intensité actuelle de ce goût du rêve est la prédominance que la musique a prise chez nous depuis ces dernières années, parce qu'elle est le plus vague de tous les arts, le plus capable de conduire l'imagination dans l'incertaine et l'indéterminé de la fantaisie. Nous avons vu à l'occasion de M. Dumas, cet énergique et ce volontaire, que le mysticisme était le terme de beaucoup de pensées modernes.

Section B.

Answer any THREE *questions.*

Each question carries 10 *marks.*

2. Who were the *Parnassiens* ? Write an account of the work of any one of them.

3. Show your acquaintance with *one* of the following works:—
Henriade; *Caractères*; *Athalie*; *Le Génie du Christianisme*; *Vingt ans après*.

4. Estimate the importance in the history of French Literature of *one* of the following writers:—Beaumarchais, Du Bellay, Pascal, Fénelon, Alfred de Vigny.

5. Write a full note on *one* of the following:—

(*a*) The quarrel of the Ancients and Moderns.

(*b*) Criticism as exemplified in the work of any French critic you know.

(*c*) Hôtel de Rambouillet.

SECTION C.

Answer any THREE *questions.*

Each question carries 10 *marks.*

6. Trace the history of *two* of the following vowels, from Latin to Modern French:—*a*, *è* (open *e*), *u*, *é* (close *e*).

7. Give examples of nouns which have survived in the nominative and genitive forms instead of the accusative.

8. Write out in the Singular and Plural the 1st, 2nd, and 3rd Personal Pronouns in Old French.

9. Explian *two* of the following:—*hiatus, caesura, alexandrine, enjambement.*

10. Give the history of *four* of the following words:—*aller. avoir, minuit, espace, chevalier, soutenir, maudire, parfait.*

FRENCH.

FIRST PASS PAPER.

Examiner—REV. E. FRANCOTTE, S.J.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate *two* of the following passages:— 12

(*a*) J'ai reposé mon front sur mon fusil sans poudre,
Me prenant à penser, et n'ai pu me *résoudre*
A poursuivre sa louve et ses fils, qui, tous trois,
Avaient voulu l'attendre ; et, comme je le crois,
Sans ses deux louveteaux, la belle et sombre veuve
Ne l'*eût* point laissé seul subir la grande épreuve ;
Mais son devoir était de les sauver, afin
De pouvoir leur apprendre à bien souffrir la faim,
A ne jamais entrer dans le pacte des villes
Que l'homme a fait avec les animaux serviles ;
Qui chassent devant lui, pour avoir le coucher,
Les premiers possesseurs du bois et du rocher.

(*b*) Puis, à pas lents, musique en tête, sans fureur,
Tranquille, *souriant* à la mitraille anglaise,
La Garde impériale entra dans la fournaise.
Hélas ! Napoléon, sur sa garde penché,
Regardait, et sitôt qu'ils avaient débouché,
Sous les sombres canons crachant des jets de soufre,
Voyait, l'un après l'autre, en cet horrible gouffre,
Fondre ces régiments de granit et d'acier.
Comme *fond* une cire au souffle d'un brasier.
Ils allaient, l'arme au bras, front haut, graves, stoïques.
Pas un ne recula.   Dormez, morts héroïques !
Le reste de l'armée hésitait sur leurs corps,
Et regardait mourir la Garde.

(*c*) On me dit cependant qu'une joie infinie
Attend quelques élus.—Où sont-ils, ces heureux ?
Si vous m'avez trompé, me rendrez-vous la vie ?
Si vous m'avez dit vrai, m'ouvrirez-vous les Cieux ?
Hélas ! ce beau pays dont parlaient vos prophètes,
S'il existe là-haut, ce *doit* être un désert.
Vous les *voulez* trop purs, les heureux que vous faites,
Et quand leur joie arrive ils en ont trop souffert.
Je suis seulement homme, et ne veux pas moins être,
Ni tenter davantage.—A quoi donc m'arrêter ?
Puisque je ne puis croire aux promesses du prêtre,
Est-ce l'indifférent que je vais consulter ?

2.   Parse, giving principal parts :—   12
résoudre, eût (extract (*a*)), *souriant*, *fond* (extract (*b*)), *doit*, *voulez*

(extract (*c*)).

3.   Answer *two* of the following :—   12

(*a*) Et cependant, Seigneur, je ne suis pas heureux ;
Vous m'avez fait vieillir puissant et solitaire,
Laissez-moi m'endormir du sommeil de la terre.

Who is the author of these lines ?   In what poem do they occur ?
Show how the poem embodies one of the author's favourite ideas.

(*b*) Assez de malheureux ici-bas vous implorent :
Coulez, coulez pour eux ;
Prenez avec leurs jours les soins qui les dévorent ;
Oubliez les heureux *l*

Give the context of these lines, and write a short appreciation of
the poem in which they occur.

(*c*) Descartes m'abandonne au sein des tourbillons.
Montaigne s'examine, et ne peut se connaître,
Pascal fuit en tremblant ses propres visions.

Write short accounts of *two* of the authors mentioned in these lines.

4.   Translate *two* of the following passages :—   12

(*a*) *Cyrano.*   Et que faudrait-il faire ?
Chercher un protecteur puissant, prendre un patron,
Et comme un lierre obscur qui circonvient un tronc
Et s'en fait un tuteur en lui léchant l'écorce,
Grimper par ruse au lieu de s'élever par force ?
Non, merci.   Dédier, comme tous ils le font,
Des vers aux financiers ? se changer en bouffon
Dans l'espoir vil de voir, aux lèvres d'un ministre,

Naître un sourire, enfin, qui ne soit pas sinistre ?
Non, merci.   Déjeuner, chaque jour, d'un crapaud ?
Avoir un ventre usé par la marche ? une peau ?
Qui plus vite, à l'endroit des genoux, devient sale ?
Exécuter des tours de souplesse dorsale ? . . .
Non, merci.

(b)   *Cyrano.*—Je sais tout ce qu'il faut.   Prépare ta mémoire,
Voici l'occasion de se couvrir de gloire.
Ne perdons pas de temps.   Ne prends pas l'air grognon.
Vite, rentrons chez toi, je vais t'apprendre . . .
  Christian.   Non !
  Cyrano.—Hein ?
  Christian.   Non ! j'attends Roxane ici.
  Cyrano.   De quel vertige
Est-tu frappé ? Viens vite apprendre . . .
  Christian.   Non, te dis-je !
Je suis las d'emprunter mes lettres, mes discours,
Et de jouer ce rôle, et de trembler toujours ! . . .
C'était bon au début !   Mais je sens qu'elle m'aime !
Merci.   Je n'ai plus peur.   Je vais parler moi-même.

(c)   DE GUICHE, *surpris et satisfait.*
Vous savez ce détail ? . . . En effet, il advint,
Durant que je faisais ma caracole afin
De rassembler mes gens pour la troisième charge,
Qu'un remous de fuyards m'entraîna sur la marge
Des ennemis ; j'étais en danger qu'on me prit
Et qu'on m'arquebusât, quand j'eus le bon esprit
De dénouer et de laisser couler à terre
L'écharpe qui disait mon grade militaire ;
En sorte que je pus, sans attirer les yeux,
Quitter les Espagnols, et revenant sur eux,
Suivi de tous les miens réconfortés, les battre f
—Eh bien ! que dites-vous de ce trait ?

5.   Comment on the mood of the verbs italicized :—   6

  (a) J'ai trop peur qu'un refus ne vous *soit* un chagrin.
  (b) Ah ! ces horreurs, il a fallu que je les *visse*
      Pour y croire.
  (c) Peut-être siérait-il que je vous *présentasse,*
      Puisqu'il en est ainsi, quelques de ces messieurs.

6.   Give the English equivalents for the idiomatic phrases itali-   6
cized :—

  (a)   Ce départ me désespère !
      Quand on tient à quelqu'un, le savoir à la guerre !
  (b) Va, ne deviens pas laid ; *elle m'en voudrait trop.*
  (c) Dans les oreilles, moi, j'ai des bourdonnements
      Cyrano.   Non, non ; *ventre affamé, pas d'oreilles* :
          tu mens !

7.   Give some account of Edmond Rostand, with a list of his chief   5
literary works.

8.   When are the events of *Cyrano de Bergerac* represented as   5
having taken place ?   Give an account of the historical background
of the play.   Is the unity of time observed ?

9. Translate any *two* of the following passages :— 30

(a) Quand tes beaux pieds distraits errent, ô jeune fille,
Sur ce sable mouillé, frange d'or de la mer,
Baisse-toi, mon amour, vers la blonde coquille
Que Vénus fait, dit-on, polir au flot amer.
L'écrin de l'Océan n'en a point de pareille ;
Les roses de ta joue ont peine à l'égaler ;
Et quand de sa volute on approche l'oreille
On entend mille voix qu'on ne peut démêler.
Tantôt c'est la tempête avec ses lourdes vagues
Qui viennent en tonnant se briser sur tes pas,
Tantôt c'est la forêt avec ses frissons vagues,
Tantôt ce sont des voix qui chuchotent tout bas.
Oh ! ne dirais-tu pas, à ce confus murmure
Que rend le coquillage aux lèvres de carmin,
Un écho merveilleux où l'immense nature
Résume tous ses bruits dans le creux de ta main ?

(b) J'en rends grâces au ciel qui, m'arrêtant sans cesse,
Semblait m'avoir fermé le chemin de la Grèce ;
Depuis le jour fatal que la fureur des eaux,
Presque aux yeux de l'Épire, écarta nos vaisseaux.
Combien, dans cet exil, ai-je souffert d'alarmes !
Combien à vos malheurs ai-je donné de larmes !
Craignant toujours pour vous quelque nouveau danger,
Que ma triste amitié ne pouvait partager.—
Surtout je redoutais cette mélancolie,
Où j'ai vu si longtemps votre âme ensevelie—
Je craignais que le ciel, par un cruel secours,
Ne vous offrît la mort que vous cherch ez toujours.
Mais je vous vois, seigneur ; et, si j'ose le dire,
Un destin plus heureux vous conduit en Épire.
Le pompeux appareil qui suit ici vos pas
N'est point d'un malheureux qui cherche le trépas.

(c) D'un des pans de sa robe il couvre son visage,
A son mauvais destin en aveugle obéit,
Et dédaigne de voir le ciel qui le trahit,
De peur que d'un coup d'œil contre une telle offense
Il ne semble implorer son aide ou sa vengeance ;
Aucun gémissement à son cœur échappé
Ne le montre, en mourant, digne d'être frappé :
Immobile à leurs coups, en lui-même il rappelle
Ce qu'eut de beau sa vie, et ce qu'on dira d'elle,
Et tient la trahison que le roi leur prescrit
Trop au-dessous de lui pour y prêter l'esprit.
Sa vertu dans leur crime augmente ainsi son lustre,
Et son dernier soupir est un soupir illustre,
Qui, de cette grande âme achevant les destins,
Étale tout Pompée aux yeux des assasins.

FRENCH.

Second Pass Paper.

Examiner—T. S. Sterling, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English *five* of the following passages :—   25

(*a*) Et nous avions tous des larmes dans les yeux de voir le pauvre vieux se démener de droite et de gauche, éventrant les sacs, surveillant la meule, tandis que le grain s'écrasait et que la fine poussière de froment s'envolait au plafond. C'est une justice à nous rendre : à partir de ce jour-là, jamais nous ne laissâmes le vieux meunier manquer d'ouvrage.

(*b*) Fatigué d'en avoir tant dit, le berger s'assit, et le patron reprit la parole : ' Oui, monsieur, c'est ce pauvre vieux qui est venu nous prévenir. Il était presque fou de peur ; et, de l'affaire, sa cervelle en est restée détraquée. Le fait est qu'il y avait de quoi . . . Figurez-vous six cents cadavres en tas sur le sable, pêle-mêle avec les éclats de bois et les lambeaux de toile.'

(*c*) Pendant ce temps, un drame terrible se passait à l'autre bout de la chambre, devant l'armoire. Il s'agissait d'atteindre là haut, sur le dernier rayon, certain bocal de cerises à l'eau-de-vie qui attendait Maurice depuis dix ans et dont on voulait me faire l'ouverture. Malgré les supplications de Mamette le vieux avait tenu à aller chercher ses cerises lui-même ; et, monté sur une chaise au grand effroi de sa femme, il essayait d'arriver là-haut.

(*d*) Lorsque les chefs de la commune eurent adressé leurs propositions à Thomas de Marle, celui-ci demanda à en délibérer séparément avec les siens : tous furent d'avis que ses troupes n'étaient pas assez nombreuses pour tenir dans la place contre la puissance du roi. Cette réponse était dure à donner. Thomas craignit qu'elle n'excitât le ressentiment des bourgeois et q'uils ne voulussent le retenir de force pour lui faire partager, bon gré mal gré, les chances de leur rébellion.

(*e*) Menacé pour la seconde fois d'être assiégé par les révoltés, Henri de France ne s'adressa pas à son frère, qu'il trouvait trop tiède, mais à un souverain étranger, le comte de Flandre. Il l'invita à venir à Reims avec une troupe de mille chevaliers, ce qui, en comptant les sergents d'armes dont chaque chevalier était accompagné, devait faire environ six mille hommes.

(*f*) Un des religieux, inspectant à cheval les propriétés de l'abbaye, recontra un homme qui coupait du bois dans une réserve ; il voulut lui enlever sa cognée pour gage de l'amende, mais cet homme le frappa violemment et le renversa de cheval. Des serviteurs de l'abbaye s'emparèrent du coupable, qui eut les yeux crevés par vengeance et sans aucun jugement.

2. Write short notes on *three* of the following :—*le moulin de Jem-*   9
mapes ; Gringoire ; bandits corses ; Lucquois ; Secousse ; Villy.

Either,

3. Contrast Daudet and Thierry as letter-writers.   12

Or,

Estimate the position of Daudet in the history of French literature.

4. Translate and explain *five* of the following, adding notes on 15 points of grammar wherever necessary :—

(*a*) Le chien de garde a beau les appeler.
(*b*) Qu'est-ce qu'on leur fait donc à mes chèvres ?
(*c*) Il n'y avait pas de bonnes manières qu'on ne lui fît.
(*d*) A la longue pourtant tout se découvrit.
(*e*) Taillables à merci.
(*f*) A l'insu du roi.
(*g*) En la miséricorde des juges.
(*h*) Les droits de cour plénière, d'ost et de chevauchée.

Etiher,

5. Give rules (with examples) for the agreement of the past parti- 9 ciple.

Or,

Give rules (with examples) for the use of the Subjunctive Mood in French.

6. Translate into English :— 30

(*a*) Après cette époque de vie forte et large, généreuse, 'libérale,'—pour répéter un de ses termes favoris—où toutes les facultés de l'homme semblent avoir également pu s'exercer, vient un siècle plus intellectuel, où l'esprit, tantôt grave et tanôt léger, tantôt domine et étouffe, et tantôt dissèque et amoindrit, le sentiment et l'imagination ; et toute la conduite de la vie, toutes les expressions de l'art, ont désormais quelque chose de plus conscient, de plus étudié, mais souvent aussi de plus lent et de plus froid.

(*b*) Le repos est tout au plus ce qu'on peut attendre d'une vie sédentaire et inactive : le repos, état de neutralité entre la peine et la plaisir. La vivacité des sensations, les élans de la vigueur, la confiance de succès, et le mépris des fatigues, sont réservés à ceux qui fortifient leurs muscles et endurcissent leurs fibres, qui entretiennent par le mouvement la souplesse de leurs membres, et qui s'aguerrissent par de fréquentes épreuves aux impressions ordinaires du froid et de la chaleur.

FRENCH.

THIRD PASS PAPER.

Examiner—REV. E. FRANCOTTE, S.J.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Out of the following, turn into Classical French *three* Prose pas- 50 sages and *two* of Poetry :—

(*a*) *Alhadra.* I crept into the cavern—
'Twas dark and very silent. What saidst thou ?
No! No! I did not dare call Isidore,
Lest I should hear no answer ! A brief while,

Belike, I lost all thought and memory
Of that for which I come! After that pause,
O Heaven! I heard a groan, and followed it;
And yet another groan, which guided me
Into a strange recess—and there was light,
A hideous light! His torch lay on the ground;
Its flame burnt dimly o'er a chasm's brink;
I spake; and whilst I spake, a feeble groan
Came from that chasm! It was his last —his death-groan!

(b) Think, O my Soul, devoutly think,
How with affrighted eyes
Thou saw'st the wide extended Deep
In all its horrors rise!
Confusion dwelt in ev'ry face,
And fear in ev'ry heart,
When waves on waves and gulphs in gulphs
O'ercame the pilot's art.
Yet then, from all my griefs, O Lord,
Thy mercy set me free,
Whilst in the confidence of pray'r
My Soul took hold on Thee . . .

(c) You shall hear how Hiawatha
Prayed and fasted in the forest,
Not for greater skill in hunting,
Not for greater craft in fishing,
Not for triumphs in the battle
And renown among the warriors,
But for profit of the people,
For advantage of the nations.
First he built a lodge for fasting,
Built a wigwam (*a hut*) in the forest,
By the shining Big-Sea-Water,
In the blithe and pleasant spring-time . . .

(d) Then answered Caius Cossus:
' I see an evil sight;
The banner of proud Tusculum
Comes from the Latian right;
I see the plumèd horsemen;
And far before the rest
I see the dark-grey charger,
I see the purple vest;
I see the golden helmet
That shines far off like flame;
So ever rides Mamilius,
Prince of the Latian name.

(e) Gentlemen, when I came hither, I did think that a duty was
incumbent upon me a little to pity myself; because, this being a very
extraordinary occasion, I thought I had very many things to say unto
you, and was somewhat burdened and straitened thereby. But, truly
now, seeing you in such condition as you are, I think I must turn off
my pity in this, as I hope I shall in everything else; and consider you
as certainly not being able long to bear that condition and heat that
you are now in.—So far as possible, on this large subject let us be brief,
not studying the art of Rhetoricians. Rhetoricians, whom I do not
pretend to much concern with, neither with them, nor with what they
use to deal in: *words!*

(*f*) It may be worth while to examine how darkness can operate in such a manner as to cause pain. It is observable, that still as we recede from the light, nature has so contrived it, that the pupil is enlarged by the retiring of the iris, in proportion to our recess. Now, instead of declining from it but a little, suppose that we withdraw entirely from the light; it is reasonable to think, that the contraction of the radial fibres of the iris is proportionably greater; and that this part may by great darkness come to be so contracted as to strain the nerves that compose it beyond their natural tone; and by this means to produce a painful sensation. Such a tension there certainly is, whilst we are involved in darkness. . . .

(*g*) To the Rev. William Unwin—Jan. 3, 1784.
My dear William, Your silence began to be distressing both to your mother and me, and had I not received a letter from you last night, I should have written by this post to enquire after your health. How can it be, that you, who are not stationary like me, but often change your situation and mix with a variety of company, should suppose me furnished with such abundant materials, and yourself destitute ? I assure you faithfully that I do not find the soil of Olney prolific in the growth of such articles as make letter-writing a desirable employment. No place contributes less to the catalogue of incidents, or is more scantily supplied with anecdotes worth notice. We have
> One parson, one poet, one bellman, one crier,
> And the poor poet is our only 'squire.—W. C.

(*h*) I believe that the educational value of a worthy setting of a great University is not to be despised. Traditions cling round our buildings. They become part and parcel, as it were, of the fabric in which the studies take place. They are intimately associated with the recollections or the students after they have left the place of their education. They form part of that most valuable result of academic training—the love with which those who have been academically trained look back to the freshest, the brightest, and the most plastic period of their lives. If history teaches us anything about the condition of University life, it is that a University, once founded, is possessed of a wonderful, persistent vitality.

(*i*) An ant is a wise creature for itself; but it is a shrewd thing in an orchard or garden. And certainly men that are great lovers of themselves waste the public. Divide with reason between self-love and society; and be true to thyself, as thou be not false to others; especially to thy King and country. It is a poor centre of a man's actions, *himself*. It is right earth. For that only stands fast upon his own centre; whereas all things that have affinity with the heavens, move upon the centre of another, which they benefit. The referring of all to a man's self is more tolerable in a sovereign prince; because themselves are not only themselves, but their good and evil is at the peril of the public fortune. But it is a desperate evil in a servant to a prince, or a citizen in a republic.

2. (*a*) Give the principal parts of the following verbs :—*assaillir*,   4
courir, *s'asseoir*, *moudre*—the 1st person sing. of the *temps primitifs* only.

(*b*) Name *two* French verbs used only in the present infinitive.   1

(*c*) Conjugate, with a negative, the present conditional of *avoir*;   4
the passé défini of *coudre* (without the negative) ; the imperative mood of *croire*; and the pluperfect subjunctive of *faire*.

3. (*a*) Give some rules for the formation of the plural in compound   3
substantives. Illustrate each rule by one example.

(b) What do you know about the agreement and use of posses-   4
sive adjectives and pronouns ? Is it the same in English ? Illustrate.

(c) Translate :—It is proper that he should come. He does not   2
reflect that he is deceiving himself. However rich you may be. I
doubt whether he has done his task.

(d) Correct, without comment :—*Elle s'est dite : je suis riche. On*   2
leur a accordé toutes les faveurs qu'ils ont voulues.

4. (a) Write a brief summary of the wars of Charlemagne.   5

(b) Say a few words about Hugh Capet. By whom was he elected   2
King of France ? About what time ? Did he make any conquest ?

(c) What do you know about Peter the Hermit and Godefroy de   3
Bouillon ?

(d) Summarize the Hundred Years' War mentioning only the   8
most important events of that period of the history of England and
France.

(e) Mention the chief events connected with the public life of   3
Joan of Arc.

(f) Say a few words about the religious troubles which desolated   3
France during the reign of Henri IV. Who was Ravaillac ?

(g) Who were the following, and for what were they remark-   3
able :—Condé, Richelieu, Fouquet ? Who ruled over France in their
time ?

(h) What do you know about the Second French Republic ?   3
What was its final issue ?

SYRIAC.

Paper-setters—{ A. H. HARLEY, ESQ., M.A.
{ REV. N. G. KURIAKOS.

FIRST PASS PAPER.

Examiner—A. H. HARLEY, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English: 12

ܐܠܐ ܕܒܪ ܟܠ ܡܕܝ ܐܡܪ ܐܢܐ . ܒܪܝܚܐ ܟܠܗܐ ܕܐܠܘܗܝ ܗܘܐ ܒܪܝܢ
ܐܕܟܪ . ܡܙܒܢ ܚܕܝܪܘܬܐ ܘܒܣܡܬ ܒܠܐܦܝ . ܗܠܝܢ . ܐܚܕܐ ܢܬܕܟܪ ܟܘܠܐ
ܡܢ ܥܬܝܩܝ ܗܘܐ ܐܝܟ ܐܘܠܗܐ . ܟܘܣܛܐ ܘܚܟܝ ܨܒܐ ܚܠܐ ܘܩܐ . ܐܫܕܐ
ܕܒܝܗܐ .. ܐܡܘܡܐ ܒܪܙ ܕܐܝܟ . ܐܘܠܗ ܐܠܐ ܘܛܘܗܝ ܗܘܐ ܬܢܝ ܕܐܒܐ . ܗܘ ܗܘ
ܘܚܠܐ ܕܒܝܗܐ ܘܚܕܐ . ܡܢ ܚܠܐ ܒܙܪܝܒ ܐܫܘܪܙ ܠܐ ܡܐܡܪܐ ܐܢܐ ܠܘܣ ܐܢܠ ܟܠܗ .
ܕܐܬܒܪ ܐܫܘܡܒܬ ܟܒܒܝܢܐ . ܒܕܟܙܒܝ ܗܘ ܒܓܝ ܐܠܐ ܗܟܠܐ
ܗܟܚܠܗ . ܘܕܐܡܐ ܟܚܟܡܐ ܐܝܠܘܝ ܗܘ ܕܚܠܐ ܐܠܐ ܨܒܘܗܝܐ . ܐܡܕܙ ܗܘܐ ܝܚ
ܟܘܐܢܗ . ܘܬܒܩܐ ܐܫܘܩ ܐܟܪܣ ܕܢܢܐ . ܐܕܡܝܚܝ ܒܕܟܚܙ ܬܟܠܝ ܗܘܬܝ .
ܕܙܒܣܐ ܐܘܡܣܐ ܗܘ ܐܫܘܒ ܨܒܝ ܬܒܘܗ . ܡܚܗܠܐ ܬܣ ܐܠܐ ܕܒ ܘܟܠܗܝ ܚܒܡܙ
ܟܚܡܘܐܠܐ ܗܘ . ܕܐܘܗܝ ܬܪܕܐ . ܚܙ ܐ ܣܒܠ ܐܫܟܘܢ . ܒܕܟܙ ܟܝܕ ܗܘܐ .
ܘܗܘ ܘܬܒܩܐ ܐܚܕܐ ܒܐܟܟܪ ܚܕܐ ܐܡܕ ܐܘܐܫܘܐ ܚܠܐ ܘܐܕܐ ٭

2. (1) Point the passage in question 1. 12
   (2) Parse the underlined words in question 1.

3. (i) Attach pronominal suffixes to 3rd sing. masc. perfect pael of
   ܒܬܠܟܝ and imperfect Aphel of ܕܝܒܐ. 16
   (ii) Write a note on any three of the following :—
      (a) The doubly defective verb
      (b) The impersonal verb
      (c) The uses of passive participles
      and (d) The infinitive absolute.

4. Translate into idiomatic Syriac :- 20
   Like Jonathan the true friend, thou hast bound thyself to me in love.
   But that the soul of Jonathan clave unto the soul of David, after
   he saw that the giant was slain by his hands and the camp delivered,
   is not so marvellous as this, because he loved him for his deeds;
   whereas thou hast loved me more than thyself, without having
   seen anything that was good in me, Nor is Jonathan's delivering of
   David from death at the hands of Saul deserving of wonder in com-
   parison with this doing of thine, because he still requited unto him
   something that was due to him; for he first delivered him from

death, and gave life unto him and all his father's house, that they
should not die by the hands of the Philistine.

5. (i) Translate the following passage into English:—

[Syriac passage — seven lines]

   (ii) Point the passage in question 5, and write notes on the underlined
expressions.

6. Write in Syriac an account of how the author of the Hebrews vindi-
cates the triumph of Faith.   20

7. Translate into English:—   10

[Syriac passage]

SYRIAC.

Second Pass Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English *one* of the following :—

A

8

ܗܨܢܐ ܚܟܚܕܘܡ ܚܠܝܪܐ ܙܪܩ ܗܕܙܪ ܗܕܝܪ ܠܡܨܕܟܚ ܨܡܨܘ ܣܘܡܨܣ ܙܡܚܣܣܐ

ܡܢ ܡܢܐ ܙܡܚܨܡܣܙܪܐ. ܗܨܢܐ ܠܝܐ ܡܚܘܡܨܐ ܠܗܪ ܠܚܘܡ ܚܚܘܡܙܐ

ܒܡܣܘܠ. ܙܐܘ ܨܪܙܐ ܡܘܡܠ ܠܚ ܘܡܗܐ. ܘܨܘ ܗܟܐܠܣܗܣ ܘ݂ܪܙܣܘܢ

ܕܐܠ ܣܘܠ ܨܡܥܣ ܐܠܕܘܪ ܡܢ ܗܨܢܐ ܟܗ ܨܙܪܒܗܐ : ܗܘܚܚܟܡܘ

ܚܚܣܐ ܠܗܨܢܐ ܗܡܕܟܗ ܘܐܗܪ ܚܠܐ ܐܚܟܘ ܘܘܗܘܚܡ ܐܘܬ ܪܨܐ ܐܘܐ ܘܠܐ ܘܠܐ ܠܨܙܐ

ܚܚܘܡ. ܘܨܡܠܐ ܨܙܒܠ ܘܗܚ ܘܨܡܐ ܨܘܡܥܣ ܗܟܚܘܗܣ ܚܠܢܝܪܐ. ܘܚܗܝܡ ܗܘ

ܗܘܒܠ ܘܨܠܐ. ܘܟܚܚܒ ܟܗܠܠ ܗܕܚܣܠܐ ܘܘܨܥܡܘ ܨܗܝܪ ܘܠܐ ܣܘܠܐ ܨܘܥܣܣ ܘܨܐ

ܘܒܣܣܡܗܐ : ܠܠܐܠ ܘܒܣܠܐ ܘܘ ܘܐܗܚܐܪ ܡܢ ܐܗܐ ܘܗܘܗܗܣ ܐܢܘܡ ܚܠܗܟܚܠܐ ܚܘܗ

ܐܠܘ ܙ ܘܚܨܚܚܒܐ. ܘܘ ܢܗܠܐ ܚܠܐ ܚܠܢܝܪܐ ܗܐܘܘܠܢܐ ܚܗܝܢܐ ܘܗܝܣܠܐ ܘܠܣܣܗܐ

ܚܘܗܝܘܣܘܢܘ ܘܚܚܚܨܗܘܗܣ ܘܗܚܨܚܗ ܚܠܐ ܗܨܢܐܗ.

B

ܣܪܢܐ ܐܘܣ ܘܗܚܚܗܗ ܣܘܗܣܘ ܘܗܨܙܚ ܐܨܢܐ ܘܚܗܪܢܣ. ܗܨܗܨܘܗܗ ܘܠܘ

ܘܗܨܗܕܢܣ ܐܘܘ ܙܗܙܪ ܚܗܥܢܐ. ܙܘܢܣ ܚܚܠܟܐ ܗܠܠܝܒ ܗܗܘܐܠ ܣܘܘܗܗܝܢܐ ܙܘܗܘܐ ܚܐܗܣܡܗ.

ܣܪܢܗܝܣ ܘܚܚܚܠܟܚܗ ܚ ܘ݂ܪܗܣ ܗܐܗܗܝܢܣ ܣܘܗܗܘܗܢ ܣܗܘܢ. ܚܚܚܚܗ ܗܚܠܗܐ

ܘܐܚܚܗܨܗ ܟܚ ܘܗܗܗ ܚܚܗ ܚܒܗܪܒ ܘܐܗܘܨܘ ܘܐܗܗܘܨ ܘܐܗܘܡܚܐ ܡܢܣ ܐܠܐ ܐܘܣܘܐ

ܠܠܗܘܣ ܘܠܐܣܣܒܣ ܗܗܨܥ ܗܗܝܗܘܗܘܨܐ ܘܘ ܘܠܨܚܚܚܣܝ ܗܘܗܚܚܐ ܚܚܠܗܝܒ ܚܨ ܐܗܨܐ

ܘܗܝܠܠܒ ܗܗܝܪ ܠܘܪܐܕܠܣ ܘܘܗܝܗܘܗ ܘܘܗܝܗܝܣ ܘܗܗܘܗܐ ܠܗܘܗܐ ܨܗܗܟܚܠܣ ܘܘܣܘܗܝܪܣ.

ܠܐ ܚܙܪܐ ܚܚܗܣ ܚܕܣ ܨܙܗ ܣܘܐ ܘܗܘܗܘܐ ܗܗܝܪܘܗܨ ܚܚܗܘܗܣ ܚܚܚܗܝܣ. ܗܗܝ ܚܘܗܐ ܗܚܚܚܐ

ܘܘܗܗܠܘܪܐ ܗܚܗܝܣ ܚܚ ܘܚ ܗܚܚܘܗܝܣ. ܗܗܢܐ ܣܗܐ ܘܘܗܗܐ ܡܣܣܗܘܗܠܐ ܘܗܘܗ ܘܙܘܣ ܗܚ

ܘܚܗܘܣ ܘܗܗܘܗ ܗܗܘܗ ܘܒܚܗܘ ܚܗ݂ܗܘܐܚܚܠܐ ܡܢ ܗܘܗ݂ܗܘܗܘܗܣ.

2. (a) Can you mention any other meanings attaching to the root ܗܚܡ؟ 18

   (b) What part of speech is ܣܢܩ ? Use a derivative of this word to
       express " the besieged."

(c) What is the significance of a cognate infinitive attached to a finite verb?

(d) Attach suffixes to the *singular* and *plural* of ܟܬܒ .

(e) What is the form of the word ܡܠܟܐ ?

(f) In what ways may a verb govern a noun in Syriac?

(g) How may *repeated action* be expressed in Syriac?
     Translate : " I will again feed thy flock."

3. Translate the following : —

(a)

12

ܡܚܣܝܐ ܐܠܗܐ ܒܟܠ ܗܘ ܕܐܦ ܗܘܐ ܘܚܣܝܐ ܗܘ ܡܚܣܝܟܘ ܘܒܪܢܫܐ ܘܐܪܥܐ ܐܠܗܐ ܗܘ ܕܒܪܝܬܐ ܐܝܬ ܗܘܐ ܘܚܣܝܐ ܗܘܐ ܣܒܠ ܠܐܕܐ ܒܟܒܝ ܝܠܕܝܢ ܗܘ . ܗܘܢ ܕܒܪܢܫܐ ܘܚܣܐ ܢܫܩ ܢܐ ܗܠܐ ܘܒܟܡܐ . ܘܟܒܝܠ ܟܚܒܝܢ ܘܠܥܡܝܒܝܣܘܢ ܘܟܣܐ ܟܠܐ ܡܚܣܢܐ ܨܒܝܐ . ܘܐܪ ܨܪܝܐ ܘܒܟܢ ܟܚܒܝܢ ܗܕܐ ܘܒܣܟܐ ܡܥܠܢ ܘܚܣܐ .

(b)

ܠܐ ܡܨܝܢ ܐܠܗܐ ܡܗܝܐ ܡܚܣܟܒܝܢܕܐ ܘܒܟ ܘܩܕܝܒ ܐܣܢ ܡܝ ܟܡܐ ܘܒܟܒ ܡܠܐ ܡܗܝܐ ܡܚܟܡܐ ܘܒܣܘܡܒܝ ܘܚܟܐܐ ܟܚܝܠܐ ܨܝܡܡܐ ܡܝ ܟܨܘܒ ܘܥܨܘܒ ܐܠܚܣܢܐ . ܐܪ ܝܡܝ ܐܢܐ ܣܡܝܐ ܘܐܣܕܟܐ ܗܟܡ ܟܢܐ ܘܨܡܡܢܐ ܡܕܢ ܟܨܘܒ ܘܐܪ ܘܚܒܐ ܣܒܕܢܐ ܐܢܕܐ ܟܪܚܐ ܘܒܟܣ ܗܣܐ ܨܨܡܡܐ ܡܕܢ ܐܡܚܟܐ . ܘܪܟܡܝ ܐܠܚܣܐ ܨܪܝܣܐ ܐܢܩ .

(c)

ܡܨܢܐ ܐܪܕܢ ܟܚܟܚܣܘ ܐܚܟܝ ܘܚܣܘܡܣܝܐ ܐܟܢܒܣܝܢܐ ܐܕܝܘܐ ܡܕܢ ܚܕܣܐ . ܐܢܣܐ ܩܢܪܝ ܗܕܝܐ ܐܟܣܘܨܐ ܘܒܟܠܣ ܘܣܚܐܘܣܡ ܨܡܐ ܐܢܩ ܡܝ ܣܒܪܬܐ ܘܠܐ ܡܚܟܡ . ܘܨܡܣܡܐ ܐܢܩ ܟܠܣܐܐ ܘܣܚܝ ܦܗܝܕܐ ܘܨܘܨܘܣܒ ܒܪ ܟܚܡܐ ܐܠܐ ܣܣܐ ܩܣܘܟܝܢܣܘܢ ܘܠܐ ܟܠܢܐ ܐܠܐ ܟܪܡܢܐ ܟܚܣܝܣܐ . ܟܢܐ ܝܡܝ ܐܚܐ ܨܪܡܕܢܝ ܐܠܐ ܐ ܟܚܣܘܣܡܘܣܘܢ ܣܣܪܢܐ ܚܨܐ ܘܒܟ ܘܨܗܐܡܨܨܒܣܘܢ ܐܗ ܣܠܝ ܗܣܡܨܢܒܠܝ ܘܢܣܗܐ ܟܡܗܚܣܘܣܐ ܘܣܨܨܡܢܐ ܘܣܣܘܐ ܘܨܗܦܟܚܐܩ ܐܩܟ ܡܟܣܘܢܩ .

(d)

ܡܢܚܣܣܝܐ ܘܚܣܝܐ ܡܪܚܣܢܐ . ܗܨܨܡܨ ܘܚܝܘܦܣܐ ܘܚܣܝܣܐ ܠܗ ܠܚܣܣܘܢܐ ܘܡܚܚܟܟܒܣܝ ܟܚܣܣܡܗ . ܟܚܨܣ ܐܣܐ ܡܨܢܐ ܐܠܗܐ ܗܣܘܨܣܡܣܘܢܐ ܘܣܘܨܒ . ܟܢܣܗܘܣ ܡܨܣ ܗܢܡܝܠܐ ܘܨܨܨܐ ܐܠ ܗܣܡܗܢܣܡ . ܡܟܚܣܣܘܣܡܢܝ ܘܒܟ ܗܣܘܣܩܣܐ ܘܒܟ ܗܣܐ ܘܒܟ ܡܚܨܣܡܢܐ . ܣܡܗܣ ܠܨܐ ܘܚܨܐܘܨܒܣܡܚܟܚܝ . ܐܟܒܪܗܣܝ ܡܨܢܐ ܐܠܗܐ ܗܣܘܒ ܟܨܪܣܡܟܐ ܘܡܟܝ ܘܐܒܪܗܢ ܚܣܣ ܗܣܘܩ ܡܨܣ ܗܨܘܚܝܡܐ ܐܠܐ ܘܐܚܣܣܡ ܘܐܣܣܝ ܘܨܨܣܒܝ ܘܡܣܟܚܣܒܢܝ

ܘܚܠܝܡܝܢ ܘ݁ܢܕܟܘܣ, ܚܠܝ ܡܕܢܥܒܕܢ ܠܟܪܢܝܢ ܒܕܢܐ ܠܐ ܘܒܚܒ ܨܪܝܡܐܐ
. ܠܐܚܒܣܘܡܟ

4. (a) Write a note on the particle ܣ̈ and explain its use in the clause : 20

ܘܗܐ ܠ̣ܟ ܠܝܘܣܥܡܙ ܗܣܐ

(b) Remark on the form of the noun [ܟܐ] and illustrate its uses.

(c) What is the meaning of ܡܠܣܐ? Translate :

. ܐܘܚܡܘܕܡ ܠܟܐܟܡ ܚܟܡ ܗܡܐ ܠܢܝܡܚܣ ܠܠܚ

(d) What is the meaning of ܟ̈ܠܐ ? How is the past tense formed from it? Illustrate its use with pronominal affixes.

(e) Distinguish between ܡ̈ܣܚ and ܐܣܡܚ.

(f) What are the forms of the *construct singular* and the *emphatic plural* of ܠܟܪܐ? Attach suffixes to the singular. What is the derivation of this word?

5. Point *one* of the passages in *question 1.* 12

6 Translate into English :— 30

(a)

ܘܡܩܝܐܠ ܒܣܘܕܐ ܠܐܒܠܐ ܕܐ ܗܪܡ ܠܟܕܟܐܠ ܟܟܪܝܢ ܠܐ ܘܣܡܦܐ ܘܡܚܒܕܐܠ
ܘܚܒܕܒܣܒܝ ܠܐܙܒܢܕ . ܘܟܪܝܒܚܠܐ ܗܝ ܗܕ ܨܪܡܕܢܠܐ ܗܝ ܣܘܡܦܨܠ ܟܠܐ ܒܐܠܝ
ܠܐܘܢܝܗܥܒܕܐ ܘܟܕܣܐ ܗܙ ܘܙܒܝܒ ܗܝ ܗܡܕܟܠܐ ܕܐ ܨܪܨܗܝܡܣܬܐ : ܡܝܝܘܢܣܐ
ܣܘܚܙܝܒܠܐ ܗܙ ܘܚܚܟܒܙ ܘܙܘܙ ܠܒܐ ܗܨܚܡܐ ܘܥܬܐ ܐܚܡܘܘܚܡ ܘܐܒܕܠ ܟܗ ܐܟܚܕܢ ܡܚܡܢܠ
ܠܟܕܚܘܣܗ ܐܢܟܝ ܘܐܒܐ ܐܚܕܚܒ ܚܡܘܥܢܠ ܘܥܡܥܡܠ ܘܪܡܚܒ ܚܡܝܗܝܒ ܕܡ
ܟܡܗܝܣܘܟ ܘܥܢܢܕܠ ܚܡܘܕܡܨ ܡܚܟܕܠܐ ܘܚܚܚܥܢܙ ܠܟܘܗܝ ܘܐܢܒ ܚܡܝܥܢܣ
ܡܣܘܚܒܐܠ . ܘܣܘ ܗܝ ܗܥܚܣܐ ܘܪܚܥܢܬ ܚܘܢܝ ܗܝ ܠܐܗܝ ܒܣܐ ܗܕܐ ܠܐ ܠܐܙܒܣ
ܘܟܗܣܡܚܕܢܝܣ ܐܚܒ ܗܝ ܘܒܚܟ ܠܐ ܠܐܙܪܟ ܕܐܡܝܕܐ ܗܝ ܐܨܒܐ ܘܒܘܚܒܐܠ ܗܨܒܐ
ܡܙܒ ܡܚܕܐܠܐ ܗܨܒܐ ܚܘܗܝܝܒܚܐ ܡܕܢܒܐ ܘܚܚܚܒܚܒܢܠ ܐܚܕܢܐ ܐܙܗܝ ܗܕ ܙܚܣܐ
. ܥܚܟܚܒܣܣ ܩܙܝ ܟܡܣܚ .

(b)

ܘܣܕ ܚܚܝܝܠܐ ܨܚܗܝܬܙ ܨܪܢܒܐ ܠܐ ܗܠ݀ ܨܚܚܘܟܟܕ ܘܨܚܪܡܝܢܢܒ ܨ̈ܚܝ ܚܘܕܚܚܘܣܣ
ܠܐܙܝ݀ܗܣܒ ܘܚܟܟܟܚܒܐ ܦܝܟܟܚܒܐ ܗܝܪܝܗܝܒܐ ܚܚܘܣܚܟܚܐ ܚܚܟܚܥܣ ܟܟܐܙܒܝ ܚܘܗܝܒ ܗܝܬܢܝ
ܚܒܝ ܐܚܗܦܚܦܢܐ ܘܚܚܚܘܦ ܟܚܐ ܐܠܚܡܝ ܗܝ ܐܬܡܢܢܢܐ ܠܕܗܝܬܒ ܗܘܙܐ . ܘܠܐܘܬܚܕܡܐ ܚܙܚܡܚ
ܚܟܡܗܕܐ ܘܨ݀ܝܘܗ̈ܙܐ ܐܚܦܢܣ ܠܙܟܚܐ ܘܥܢܬܐ ܘܚܠܐ ܚܘܡܚܟܒ . ܗܕܡ ܗ̈ܚܐ ܠܐ݀ ܬܘܥܟܣܐ.
ܘܗܗ ܗܝܬܝܒܝܠܐ ܚܐܘܢܗܝܣܒ . ܘܥܣ ܚܟܚܣܚܘܣܣ ܒܙܕ ܐܠܪܝܡ ܗܝ ܢܕܟܟܣܚܚܕܡܐ
. ܩܪܝܗܝܣ ܠܐܘܢܝ݀ܟܐ ܒܝܝܙ ܐܙ݀ ܚܟܡܕܐ ܠܐܝ ܘܣ ܠܐܕܝ ܩܚܚܡܚܚܟܒ . ܚܚܝ݀ܚܒܡ ܠܐܐܗܚܢܠܐ ܘܗ̈ܚܝ݀ܡܐ

ܠܝܚܢܝ ܐܢܫܐ ܘܝܬܠܐ ܘܝܬܟܠܐ ܘܝܬܟܠܐ ܘܚܝܗܡܢܝܐ ܐܚܕ ܐܢܝ ܚܚܝܐ ܘܝܠܝ
ܘܝܠܟܠܐ . ܝܝܕ ܠܝܝ ܘܝܪܝ ܝܚܝܐ ܐܘܝܚܝ ܐܢܝ ܝܘܝܟܚܝ ܚܝ ܝܥܝܝܝܝܝ ܝܟܠܝܝܝܝ
ܝܠܝܪܝܝ ܐܘ ܝܘܝܚܝ ܝܝܝܐ ܘܥܝܝ ܥܡܝܝܝ ܟܝܝ ܝܝܝܝ ܝܝܝܝܐ.ܐܝ ܝܟܝܠܝ ܝܠܝܝܝܝܘ
ܘܝܝܝܝܐ ܝܠܐ ܝܚܝܐ . ܐܝ ܝܟܝܠܝ ܝܥܝܝ ܝܟܝܝ ܝܘܝܝ ܝܝܐ ܝܝܝ ܝܝܝܝܝ ܝܝܝܝܝ ܝܝܝܝ
ܘܥܝܝ ܝܠܠ ܐܝܘܝܝ ܝܘܝܘ ܝܘܝ ܝܠܝܝ ܝܠܝܝ ܝܥܝܝܝܝܐ . ܝܝܝܐ ܝܝܝ ܝܝܝܝܝܝ ܝܝ ܝܠ
ܝܝܝܝ ܝܝܝܝ ܝܘܝܝܝ ܝܝܝܝܝ ܝܝܝܝ ܝܝܝܝ ܝܝ ܝܟܝܝ ܝܝܝܝܝ ܝܝ ܝܠ ܝܝܝܝ
ܝܝܝܝܝ . ܝܝܝܝ ܝܝ ܝܝ ܝܝܝ ܝܝܝܝ ܝܝܝܝ ܝܥܝܝܝ ܝܝܝܝ ܝܝܝܝ ܝܝܝ ܝܝܝܝ ܝܝܝܝܝ
ܝܝܝܝܝ ܝܝ ܝܝ ܝܝܝ ܝܝ ܝܝܝ ܝܝܝ ܝܝܝ ܝܝ ܝܝܝ ܝܝܝܝ ܝܝܝܝ ܝܝܝ ܝܝܝ ܝܝܝܝ
. . . ܝܝܝ

SYRIAC.

Third Pass Paper.

The figures in the margin indicate full marks.

Answer any FOUR *of the following questions in group A.*

Group A.

1. "The Literature of Syriac is, on the whole, not an attractive **13** one. As Renan said long ago, the characterstic of the Syrians is a certain mediocrity." Discuss this statement of Dr. Wright.
2. Write a full account of the life and works of Bar Hebraeus. **13**
3. Write notes on any *four* of the following :— **13**

    (1) The Harp of the Holy Spirit.
    (2) The Father of Monks.
    (3) The Book of Governors.
    (4) The Book of Martyrs.
    (5) The Persian Sage.
    (6) The Book of Hierotheus.

4. Give an account of the contribution to Syriac Literature made **13** by the Monks of the Convent of Mar Matthai, near Mosul.
5. Write short notes on the life and writings of any two of the **13** following :—

    Philoxenus of Mabug ;
    Bar Sauma; Tatian; Jacob of Serug; Marutha of Taghrith. **13**

6. Give an account of any one of the principal versions of the New Testament in Syriac, and estimate its importance as a literary work.

GROUP B.

7. Give in Syriac the substance of the following fable :—   **23**

An ant went to the bank of a river to quench its thirst, and being carried away by the rush of the stream, was on the point of being drowned. A dove, sitting on a tree overhanging the water, plucked a leaf and let it fall into the stream close to her. The ant, climbing on it, floated in safety to the bank. Shortly afterwards a bird-catcher came and stood under the tree and laid a snare for the dove, which sat in the branches. The ant, perceiving his design, stung him in his foot. He suddenly threw down the snare and thereupon made the dove take wing.

Or,

Write a letter to a friend, in Syriac, describing to him any interesting event that you have yourself had a part in.

8. Translate into Syriac :—   **25**

A thirsty crow saw a pitcher with a quantity of water at its very bottom, so that it was inaccessible. He tried a variety of ways, but failed. At last he picked up pebbles and dropped them in one by one, till the surface of water rose sufficiently high to enable him to quench his thirst.

PHILOSOPHY.

Paper-setters—
> Dr. H. STEPHEN, M.A., D.D.
> P. K. CHAKRAVARTI, ESQ. M.A.
> Dr. P. K. RAY, D.Sc.
> BABU AMBICACHARAN MITRA, M.A.
> Dr. RAMDAS KHAN, M.A., PH.D.
> Dr. BRAJENDRANATH SEAL, M.A., PH.D.

FIRST HONOURS PAPER.

Examiner—J. R. BANERJEA, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Only SIX *questions to be attempted.*

The questions are of equal numerical value.

1. Is memory a fundamental phenomenon ? Give a scientific account of Retention, Reproduction, and Recognition.

2. What is the nature of Knowledge ? Discuss the conditions of Knowledge in their bearing upon the problem of an external world.

3. Trace psychologically the development of our ideas of Self and Cause.

4. Characterize those higher forms of volitional activity by which the conflict of Impulses is checked. Indicate the sphere and the limitations of the volitional control of thought and feeling.

5. What is Attention ? How is it affected by pleasure and pain ? Enumerate the nervous concomitants of Attention.

6. What is the task of psychology with regard to the question of free-will, and what is the ulterior philosophical problem ?

7. What are the grounds on which feeling is treated as a separate function or faculty of mind ? Are they valid ?

8. Give the psychological history of the ideas of Time and Space.

9. Explain fully what is meant by the evolution theory of mind. What phenomena from child life are adduced as a probable illustration of it ?

10. What reasons are there for holding the brain to be the chief organ of the mind ?

PHILOSOPHY.

SECOND HONOURS PAPER.

Examiner—DR. HIRALAL HALDAR, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

The questions carry equal marks.

Answer the questions, noticing differences of view and giving reasons for the view you hold.

Either,

1. What is the End of Ethics ?

Or,

What is the relation of Ethics to (*a*) Psychology and (*b*) Politics ?

Either,

2. Is there any distinction between Right and Good ? What is the Highest Good ?

Or,

What is the object of Moral Judgment ?

3. What are the constituent elements of Personality ? Which of them do you consider to be the most fundamental ?

4. What is the seat of Authority in Morals ?

5. Describe the function of the Moral Faculty. Is it evolved ? What do you understand by the evolution of a Faculty ?

6. What is the distinction between a Duty and a Virtue ? Is Benevolence a duty or a virtue ? Give instances of the conflict of duties, and state how the course of duty would be determined in such cases.

PHILOSOPHY.

THIRD HONOURS PAPER.

*Examiner—*DR. ADITYANATH MUKHERJEE, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Either,

1. (a) Exhibit fully the relation between Philosophy, Psychology, and Natural Science, defining and stating the sphere of each, and indicating different views. 16

Or,

(b) Explain fully the meaning of Dialectic, and exhibit clearly the different applications that have been made of Dialectic in Philosophy, and the results arrived at by this method.

Either,

2. (a) Nominalism, Conceptualism, and Realism: explain and illustrate the meanings of these terms in Logic, and the corresponding theories in Philosophy, giving the meaning and different views of Universals. 16

Or,

(b) Explain fully the content and origin of the Idea of Time, and explain and examine the theory which makes Time to be 'subjective' and the theory which makes it to be 'objective', showing the bearing of each on the theory of the world.

3. Pluralism and Monism in Philosophy: explain the meaning of each fully, and discuss the question whether the universe is a 'pluralistic universe' or a monistic one, exhibiting the consequences of each hypothesis. 17

4. Explain fully the distinguishing characteristics of Life and Growth, with illustrations, and discuss the question whether they can be accounted for as products of physical laws. 17

5. Explain fully the doctrine of Parallelism in Philosophy, and examine the view that Parallelism supplies a sufficient explanation of Mind and Body, referring briefly to the history of the theory. 17

Either,

6. (a) Explain the nature of Personality and the ground of Personal Rights, and the relation between the individual person and the Absolute. Does the Idea of the Absolute involve Necessitarianism? 17

Or,

(b) Analyse fully the Idea of the Absolute, and state and examine the difficulties which stand in the way of conceiving God as Absolute Being.

PHILOSOPHY.

Fourth Honours Paper.

Examiner—Dr. Hiralal Haldar, M.A., Ph.D.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Either,

1. Define Religion, and point out its relation to (*a*) Science and (*b*)   17
Art.
Or,

Distinguish between Natural and Revealed Religion. How are
they related to Morality ?   *Either,*

2. Analyse the Religious Consciousness, and discuss the question   14
whether it is original or derivative.

Or,

Determine the character of Causality, and show how it affects our
notion of the First Cause and of ' second causes.'

Either,

3. Set forth the Teleological Argument, and examine Kant's objec-   14
tion to it.
Or,

Examine the view that the most exalted notion which we can form
of the Deity must necessarily be anthropomorphic.

Either,

4. Indicate the character and scope of the theistic proofs. Are   14
they competent to give us an adequate knowledge of the Deity ?

Or,

Unfold the content of the idea of God as determined by the theistic
arguments. Show that ' of all knowledge the knowledge of God is,
or at least ought to be, the most progressive.'

5. Examine whether (*a*) natural evil is consistent with Divine   15
benevolence, (*b*) moral evil with God's holiness, and (*c*) human freedom
with His prescience.   *Either,*

6. Distinguish between Deism, Theism, and Pantheism. Show   14
that ' in each one's mind, left to the play of its own laws without
foreign disturbance, there is a native provision for monotheism.

Or,

Give a critical exposition of Materialism as a theory of the universe.
Show that ' materialism is inconsistent with its own theory of know-
ledge.'

7. Is the question of Future Life connected in any way with
Religion ? Examine the ground on which belief in such a life rests.

PHILOSOPHY.

FIFTH HONOURS PAPER.

Examiner—BABU KRISHNACHANDRA BHATTACHARYA, M.A.

Only SIX questions to be answered.

The questions are of equal numerical value.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. What are the contributions of Descartes to modern thought ?
Fully discuss the question.
2. Give a critical account of Spinoza's monism.
3. State and examine Berkeley's idealism and compare it with what is
called objective idealism.
4. Give an exposition of Hume's Theory of Substance and compare it
with (1) that of Locke, and (2) that of Kant.
5. What are Kant's " Ideas of Reason " ? Compare their function in
the scheme of knowledge with that of the " Categories of the Understanding."
6. State and examine Kant's ethical position.
7. Write short notes on: occasionalism, pre-established harmony,
empiricism, phenomenalism, and noumenal freedom.
8. Is philosophy progressive like the sciences ? Give reasons for your
answer.

PHILOSOPHY.

SIXTH HONOURS PAPER.

Examiner—DR. W. S. URQUHART, M.A., D.PHIL.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. What, according to Hume, is the foundation of all our conclu-   15
sions from Experience ?
What are his sceptical doubts concerning the operations of the
Understanding and what is his sceptical solution of these doubts ?
In this connexion, explain and criticize Hume's conclusion : ' All these
operations are a species of natural instincts which no reasoning or
process of the thought or understanding is able either to produce or
to prevent.'   *Either,*

2. 'As a knowing subject man is not determined by the eternal   15
consciousness, but is a reproduction of it, and therefore a free cause.'
Expound and criticize.   *Or,*

' The uniform order of nature and our knowledge of that order have
a common source in a spiritual principle.' Explain and discuss.

3.   Is there a Natural History of Experience ?   Discuss the ques-   20·
tion, contrasting the standpoints of Hume and Green.

4.   Write an essay on *any one* of the following topics:—   50·

   (*a*) Empiricism means the habit of explaining whole by parts,
and Rationalism means the habit of explaining parts by wholes.

   (*b*) The facts around us are *sub specie eternitatis* perfectly good,
and *sub specie temporis* destined to become perfectly good.

   (*c*) Finalism and Mechanism.

   (*d*) Complete Living.

   (*e*) The Meaning of Life.

   (*f*) The Psychology of War.

   (*g*) The State in Relation to the Moral Life.

PHILOSOPHY.

Paper-setters.— { DR. H. STEPHEN, M.A., D.D.
RABU AMBICACHARAN MITRA, M.A.
DR. RAMDAS KHAN, M.A., PH.D.

FIRST PASS PAPER.

Examiners.— { BABU   KRISHNACHANDRA   BHATTACHARYYA,
M.A.
BABU HEMCHANDRA DE, M.A.
BABU KHAGENDRANATH MITRA, M.A.
BABU SUSILKUMAR MITRA, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Either,

1.   (*a*) Define Psychology and point out its relation to (i) Ethics   17
and (ii) Metaphysics.   *Or,*

   (*b*) What are the methods of research available to the psy-
cholgist ?   Determine their relative values.

Either,

2.   (*a*) Explain the nature and conditions of Attention.   How is it   17
related to Consciousness ?   *Or.*

   (*b*) Distinguish between Sensation, Perception, and Appercep-
tion.   How does Acquired Perception differ from Perception ?

3.   Trace the development of the idea of Self in the human mind.   16
Is it wholly the outcome of association ?

Either,

4.   (*a*) Determine the character, forms, and scope of the Laws of   17
Association.   Are they adequate to account for all psychoses ?

Or.

(*b*) Indicate the character and course of Mental Development. Is it wholly due to circumstances ?

Either,

5. (*a*) Distinguish between Emotion, Mood, and Sentiment. 17 Analyse the Sentiment of the Sublime.

Or,

(*b*) Distinguish between Appetite, Desire, and Affection. How are they related to Instinct ?

Either,

6. (*a*) Distinguish between Deliberation, Resolution, and Effort. 16 How is Effort connected with the Consciousness of Power ?

Or,

(*b*) Explain the character and conditions of Belief. How is Belief related to Action ?

PHILOSOPHY.

SECOND PASS PAPER.

Examiners—
{
DR. P. D. SASTRI, M.A., PH.D.
DR. W. S. URQUHART, M.A., D.PHIL.
DR. ADITYANATH MUKHERJEE, M.A., PH.D.
BABU ABINASCHANDRA MAJUMDAR, M.A.
}

Candidates are required to give their answers in their own words as far as practicable.

Only SIX *questions to be attempted.*

The questions are of equal numerical value.

1. ' Ethics is more closely related to Philosophy than to the natural sciences.' Fully explain this statement.

2. Discriminate between the psychological and the ethical aspect of Springs of Action, and expound the doctrine of their ethical gradation.

3. Examine the psychological presuppositions on which all Hedonistic systems are based. Can an altruistic system be erected on a Hedonistic basis ?

4. Show how the question as to the nature of the Ethical End is connected with the question as to the true nature of the Self.

5. ' The realization of human personality means its realization in Society.' Fully explain this.

6. Explain fully what you mean by the Standards of Judgment.

7. Discuss carefully the theories which admit but mistake obligation.

8. It has been said that the idea of Self-determination combines the Libertarian and the Determinist theory. Explain the position.

9. Discuss the problem of Sin, noticing the following points :—(*a*) existence of, (*b*) nature of, (*c*) recovery from, and (*d*) responsibility for.

PHILOSOPHY.

Third Pass Paper.

Examiners—
$$
\left\{
\begin{array}{l}
\text{Rev. G. Ewan, M.A.}\\
\text{Dr. Ramdas Khan, M.A., Ph.D.}\\
\text{Dr. N. N. Sengupta, M.A., Ph.D.}\\
\text{P. K. Chakrabarti, Esq., M.A.}
\end{array}
\right.
$$

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. State clearly the meaning, province, and use of Philosophy,   16
and the relation of Philosophy to Natural Science, and to Theology.

Either,

2. (*a*) Explain fully the meanings of Dogmatism and Scepticism   17
in Philosophy, and also the meaning of Criticism and its bearing on
these two methods.

Or,

(*b*) Explain the meanings of, and difference between, Conditioned
and Unconditioned in Philosophy. On what grounds do some say
that it is impossible to know anything about what is unconditioned ?
Give your own opinion, with reasons.

3. Explain the difference between a living Organism and a piece   17
of Mechanism, and give your opinion as to whether Life can be
derived from Mechanism, with your reasons.

Either,

4. (*a*) State the principal hypotheses as to the connexion between   17
Soul and Body, and give your own conclusion, with reasons.

Or,

(*b*) Explain the meaning of Cause and Causality in nature. and
also that of Energy and Conservation of Energy, and the relation
between Energy and Causality.

5. Explain the meaning of Self and the Identity of Self, and state   17
what reasons there are for thinking that the Self will continue to
exist after the present life.

Either,

6. (*a*) What is meant by saying that the world is subject to Moral   16
Government ? What arguments may be advanced against this belief ?
Give your own conclusion, with reasons.

Or,

(*b*) What is meant by saying that the world is pervaded by
Universal Reason ? What grounds are there for believing that it is
so ? What arguments may be advanced against the belief ? Give
your conclusion.

HISTORY.

Paper-setters—
{
W. A. J. Archbold, Esq., M.A.
G. Anderson, Esq., M.A.
A. E. Brown, Esq., M.A., LL.B.
W. Owston Smith, Esq., M.A.
W. C. Wordsworth, Esq., M.A.
Babu Bipinbihari Sen, M.A., B.L.
}

First Honours Paper.

Examiner—K. S. Zachariah, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Answer Question 1 and FIVE *others.*

The figures in the margin indicate full marks.

1. Write an essay on the growth of the British Empire from 1600 to 1878.   25

2. 'Charles V was like the Tudors; Philip II, like the Stuarts.' Explain this, and illustrate it especially from the history of the Netherlands during the two reigns.   15

3. Sketch the character of Francis I, and show how it affected the history of France.   15

4. Trace the advances towards the East and North-East made by France from 1476 to 1682.   15

5. Describe the aims of the persons who played the chief parts in the Thirty Years' War.   15

6. Give an account of Austrian foreign policy from 1720 to the outbreak of the Seven Years' War.   15

7. Discuss Napoleon's account of the outbreak of war in 1803 and the breach of the Peace of Amiens.   15

8. How much of the work accomplished in the first two and a half years of the French Revolution can be considered permanent ?   15

9. Describe the activities of Napoleon III from 1856 to 1870. What were the causes of the Franco-Prussian War on the French side ?   15

HISTORY.

Second Honours Paper.

Examiner—K. S. Zachariah, Esq , M.A.

Candidates are required to give their answers in their own words as far as practicable.

Not more than SEVEN *questions to be attempted.*

The questions carry equal marks.

1. Who, and on what grounds, were the possible successors to the throne at the death of Queen Mary, and at the death of Queen Eilzabeth ?

2. What were the provisions of the Act of Supremacy and the Act of Uniformity (1559)? What were their results?

3. Explain the situation of foreign affairs at the Treaty of Cateau-Cambrésis. What were the possessions of Spain at that time?

4. Show how the Reformation in Scotland differed from that in England. Give a sketch of the situation in Scotland at the Treaty of Edinburgh.

5. Trace in outline the relations between England and France throughout the reign.

6. ' Cecil's design remained the same as Cromwell's, the delivery of English sovereignty by the help of the English parliament from the competition of rival jurisdictions, secular and ecclesiastical, domestic and foreign, and the centralization of the State by means of personal monarchy.'
Explain this statement. From what quarters did this policy encounter resistance?

7. Give some account of the expansion of England during the reign.

8. Trace the history of the Puritans during Elizabeth's reign. Show the connexion of their movement with the growth of party government.

9. In what different parts of the world was the English struggle with Spain carried on? Account for England's success.

10. Give some account of the condition of Ireland at the beginning of Elizabeth's reign. What possible solutions were there of the difficulties there? What policy did Elizabeth adopt?

11. Give some account of the literary movement of the period. Show its connexion with the events of the time.

12. What were the causes of the increase of poverty in the sixteenth century? Give an account of the Poor Law of 1601.

13. Write notes on :—

    (a) The Empire.
    (b) Henry of Navarre (explaining where Navarre is).
    (c) The Council of Trent.
    (d) The Guises.

HISTORY.

THIRD HONOURS PAPER.

Examiner—D. R. BHANDARKAR, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Answer the FIRST, SIXTH *and* EIGHTH, *and* THREE *of the remaining questions.*

The figures in the margin indicate full marks.

1. Discuss the claims to ' universal sovereignty' advanced in favour of some of the imperial dynasties that ruled in India before the establishment of the political supremacy of the British.　20

2. Attempt an estimate of the civilization and the administrative system of India in the age of the Maurya Emperors from what you　16

gather from Greek accounts as well as from Chanakya's *Arthaśastra.* Compare Chanakya's treatise on the Art of Government with the Code of Manu as manuals of statecraft.

3. Account for the reaction against Buddhism in India under the 16 Gupta Emperors, and illustrate the truth of the remark that the gradual decay of the religion was ' due in the main to causes other than persecution of princes.' To what extent were the literature and architecture of the age influenced by the Hindu revival ?

4. Add a short historical and geographical note to *each* of the fol- 16 lowing :—Aornos, Nalanda, Taxila, Barygaza, Chinabhukti, Sakala, Rajgriha, and Girnar.

5. Define the positions of the three Tamil kingdoms in Southern 16 India, and give some account of their literature and arts, of their maritime and commercial activity. Do you notice any traces of local self-government in any of these kingdoms ?

6. To what do you ascribe the slow progress of Islam in India as 16 contrasted with its rapid success in other countries of Western Asia ? Characterize the treatment of the Arab conquerors towards the subject population in India. Describe the incidence and operation of the *Jizya.*

7. Discuss the foreign origin of the Rajputs. What difference do 16 you notice between the Rajput feudal system and that which prevailed in Mediaeval Europe ? Briefly sketch the relations between the Rajput princes and the Mogul emperors from the accession of Akbar to the close of Aurungzeb's reign.

8. Compare the aims and principles followed by Asoka and 16 Akbar respectively in organizing their empires. Discuss the merits of Lord Wellesley's political system, and examine the remark : ' The Treaty of Bassein was the greatest diplomatic triumph which the world has ever witnessed.'

9. What were the elements of disintegration in the Mogul Empire 16 towards the close of the seventeenth century ? Compare the policy and methods followed by Sivaji and Baji Rao I respectively in their attacks on the Mogul Empire. Describe the political outlook of India in 1761.

10. Indicate the changes introduced into the Company's system 16 of government in India and its relations with the home government by Charter Acts and other Parliamentary measures from 1772 to 1858.

HISTORY.

FOURTH HONOURS PAPER.

Examiner—BABU ADHARCHANDRA MUKHERJEE, M.A.

Candidates are required to give their answers in their own words as far as practicable.

Answer SIX questions only.

The questions carry equal marks.

1. Draw a sketch-map indicating (*a*) the extent of the Greek world, (*b*) the extent of the Persian Empire, in 479 B.C. To what extent was any part of the Greek world then under Persian domination ?

2. How far was the course of Greek history during the period **479-404** B.C. determined by geographical considerations ?

3. What was the origin of the Confederacy of Delos ? Narrate the steps by which it was transformed into an Athenian Empire.

4. Discuss the place of Themistocles in the history of Athens.

5. What are the original authorities for the history of this period ? Discuss their reliability.

6. Explain :—ostracism, medism, sophist, tyrant, hegemony, cleruchy, Parthenon, hoplite.

7. Examine the general policy of Sparta during this period. How far did this policy determine its internal organization ?

8. Write a brief life of Pericles, and discuss his responsibility for the war between Athens and the Peloponnesians.

9. Give a detailed account of the Athenian expedition against Syracuse, illustrated by a sketch-map of the city and surroundings.

10. Write brief notes on : (a) the oligarchic party at Athens during the Peloponnesian War, (b) the fortifications of Athens, (c) the place of oracles in Greek history, (d) Phidias.

HISTORY.

FIFTH HONOURS PAPER.

Examiner—BABU ADHARCHANDRA MUKHERJEE, M.A.

Candidates are required to give their answers in their own words
*   as far as practicable.*

Answer SIX questions only, of which the NINTH must be one.

The figures in the margin indicate full marks.

1. Describe the distinctions existing between the various classes   15
of the Italian allies and subjects of Rome in the second century B.C.

2. Discuss the change that took place in the structure of the   15
Comitia Centuriata in your period.

3. Describe the foundation of Roman comedy, and discuss the   15
elements which shaped its growth.

4. Discuss the extent to which the old religion retained a hold on   15
the Roman people in your period.

5. Write notes on *any three* of the following :—   15

    (a) Quintus Fabius Pictor.
    (b) Sextus Aelius Paetus.
    (c) Marcus Porcius Cato.
    (d) Gaius Flaminius.

6. Discuss the policy of Hannibal, and state the reasons for his   15
lack of ultimate success.

7. Sketch the main features of the Roman organization of Africa   15
after the fall of Carthage in 146 B.C.

8. ' It is only contemptible disingenuousness or weakly sentimen-   15
tality which can fail to perceive that the Romans were entirely in
earnest with the liberation of Greece ; and the reason why the plan
so nobly projected resulted in so sorry a structure is to be sought only

in the complete moral and political disorganization of the Hellenic nation. . ... As things stood it was really necessary at once to put an end to such a freedom, equally pitiful and pernicious.

(MOMMSEN.)

Comment on the above, and discuss the reasons for the failure of the Roman attempt to liberate Greece in 196 B.C.

9. Write an essay on the manner in which the ground was prepared 25 in your period for the revolution that commenced subsequently under the Gracchi.

HISTORY.

Sixth Honours Paper.

Examiner—BABU JADUNATH SARKAR, M.A.

Candidates are required to give their answers in their own words as far as practicable.

Answer Question 10 and FOUR *others.*

The questions carry the same number of marks.

1. To what extent is it true to say that the Normans introduced feudalism into England as a system of land tenure and asserted it as a means of government ?

2. Discuss the causes of the long resistance of the Eastern Empire to the Ottoman Turks.

3. 'Gregory's idea was that all the Christian states should form a universal theocracy.' Examine this statement, and show what means were adopted by Hildebrand to attain this ideal.

4. 'Under his guidance the Transalpine power made its greatest effort to subdue the two antagonists which then threatened and were fated in the end to destroy it—the Papacy and the spirit of municipal independence in Italy.'

Discuss this statement with reference to the power and failure of Frederick Barbarossa.

5. With what truth may it be said that the Crusades and the Hundred Years' War made modern France ?

6. What were the chief causes of the doctrine of feudalism ?

7. In what ways was the period between the summons of the Model Parliament by Edward I and the death of Richard II important in the development of the parliamentary system ?

8. 'Italy came to the close of the Middle Ages without a national or regular government.' Give reasons for this.

9. What were the main provisions of the Golden Bull of Charles IV ? What was its effect on the history of the Empire ?

10. Write an essay on *one* of the following subjects :—

 ✓(a) The glory of the thirteenth century.
 (b) The Schoolmen.
 (c) Chivalry.

HISTORY.

Paper-setters— {
R. N. GILCHRIST, ESQ., M.A.
N. C. SEN, ESQ., M.A.
BABU BIPINBIHARI SEN, M.A., B.L.
}

FIRST PASS PAPER.

Examiners— {
A. C. DATTA, ESQ., M.A.
BABU SANTOSH CHATTERJEE, M.A.
BABU UPENDRANATH GHOSHAL, M.A.
}

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer Question 10 and FIVE *others.*

The figures in the margin indicate full marks.

1. Give a short history of Florence under the Medici with special   16
reference to their domestic and foreign policy.

2. Explain the importance of the family alliances of Ferdinand   16
the Catholic in promoting the unity of Spain and its development as
a European power.

3. Briefly sketch the history of the Turkish power from the death   16
of Solyman the Magnificent to the Treaty of Carlowitz, and indicate
the causes of its decay.

4. Describe the circumstances which led to the accession of Henry   16
of Navarre to the French throne. Discuss the merits of the economic
and financial reforms of the Duke of Sully.

5 Compare Charles XII and Peter the Great as generals and states-   16
men. How far may Peter the Great be regarded as ' the creator of
Modern Russia ' ?

6. What led to the First Partition of Poland ? How far was it   16
due to internal anarchy, how far to the ambition of foreign powers ?

7. Form an estimate of the character and aims of Mirabeau, and   16
account for his failure to realize his ideal.

8. Characterize in some detail the Napoleonic system of govern-   16
ment, and show that it was but a survival of the old régime of France.

9. Explain the character and importance of the reforms effected   16
in Prussia after the battle of Jena by Stein and his colleagues.

*10. Add a full note to *each* one of the following:—   20
    (*a*) the Inquisition : (*b*) the Treaty of Westphalia ; (*c*) the Prag-
matic Sanction ; (*d*) the Committee of Public Safety ; and (*e*) the
Sonderbund.

HISTORY.

SECOND PASS PAPER.

Examiners— { BABU KRISHNADHAN BANERJEE, M.A.
N. K. NAG, ESQ., B.A. (*Cantab*).
S. KHUDA BAKSH, ESQ., M.A., B.C.L.

Candidates are required to give their answers in their own words as far as practicable.

FIVE *questions only to be answered.*

The questions are of equal numerical value.

1. What were the chief provisions of the Second Act of Supremacy and the Third Act of Uniformity of 1559 ? State the religious difficulties that these Acts were meant to overcome.
2. Examine the foreign relations of Elizabeth with Spain, France, and Scotland during the first five years of her reign.
3. Give a short account of the career of William of Nassau, Prince of Orange.
4. Examine the purposes of, give an account of, and estimate the results of the following plots :—Ridolfi's Plot ; Throgmorton's Plot ; Babington's Plot.
5. Give an account of the risings of Desmond and Tyrone in Ireland. Give also a general account of the part played by Ireland in the Roman Catholic schemes against Elizabeth.
6. Estimate the international importance of the various marriages and proposed marriages of Mary, Queen of Scots.
7. Write historical notes on the following :—the Treaty of Cateau-Cambrésis ; the murder of Darnley ; the Peace of St. Germain ; the Massacre of St. Bartholomew's Day.
8. What is the import of the phrase ' The spacious times of Queen Elizabeth' ? Give short notes on Edmund Spenser, Christopher Marlowe, Sir Francis Bacon, and Sir Francis Drake.
9. Give an estimate of the character of Queen Elizabeth.

HISTORY.

THIRD PASS PAPER.

Examiners— { N. C. SEN, ESQ., M.A.
BABU RAMESCHANDRA MAJUMDAR, M.A.
BABU ASWINIKUMAR MUKHERJEE, M.A.

Candidates are required to give their answers in their own words as far as practicable.

Answer TWO *questions from* EACH *group.*

The questions carry equal marks.

GROUP A.

1. Trace the progress of Alexander's Campaign in India up to his arrival at the Hyphesis. Discuss the various theories about the site of Aornos.

2. Write a short note on the municipal and revenue administration of Chandragupta Maurya.

3. (a) Describe the relations of China with India during the period from the first century to the end of the reign of Harshavardan.

(b) Give a short account of the Kushan dynasty in India.

4. What are the sources of Southern Indian history ? Narrate briefly the history of the ' Three Kingdoms .'

GROUP B.

5. ' The village communities are little republics, having everything they can want within themselves, and almost independent of any foreign relations.' Discuss this statement of Metcalfe. Describe an Indian village community.

6. Give a short account of the various Mahomedan dynasties of the Deccan.

7. Describe the internal state of India during the time of the Moghuls. Give an account of Sir Thomas Roe's embassy to Jehangir and his impressions about India.

8. Who were the Seiad brothers, and what part did they play in Moghul politics in the eighteenth, century ? Narrate briefly the history of the relations of the Mahrattas with the Moghul emperors from 1707 to the third battle of Panipat.

GROUP C.

9. Write a short note on the development of the Indian administrative system during the time of the East India Company. When was its Charter renewed, and what changes did the renewals of its Charter bring about ?

10. Sketch the relations of the East India Company with the Kingdom of Oudh up to the time of its annexation.

11. Discuss the foreign policy of the Marquess of Hastings. Write a short history of his administration.

12. Write short notes on—

(a) Fox's India Bill ;
(b) Thomason's land settlement ;
(c) The affair of William Palmer & Co. ;
(d) Malcolm's Mission to Persia.

ECONOMICS.

Paper-setters—
$\begin{cases} \text{C. J. Hamilton, Esq., M.A.} \\ \text{W. Owston Smith, Esq., M.A.} \\ \text{M. Subedar, Esq., B.Sc. (Lond.).} \\ \text{W. C. Wordsworth, Esq., M.A.} \\ \text{J. N. Das Gupta, Esq., B A. (Oxon).} \\ \text{G. F. Shirras, Esq., M.A.} \end{cases}$

First Honours Paper.

Examiner—T. T. Williams, Esq., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions carry equal marks.

Only six *questions to be attempted.*

1. Discuss the relation of economics and ethics. To what extent are the motives of men leading them to economic effort measurable ? Are these motives ever unselfish ?

2. Is all labour unpleasant ? Consider the relation of work to pain with reference to the reward of labour, conditions of work, etc.

3. Why is the interest of landlords opposed to the interest of the rest of the community who have no part in the ownership of land'?

4. Discuss the effect of fluctuations in the value of articles of which there is a joint supply or a joint demand.

5. What is meant by " invisible exports " in the balance of indebtedness between two countries ? Mention some of the items under this heading in the relation of England and India.

6. Profits are the reward of enterprise. Profits are high in new industries, they are low in old industries. Why do they not disappear altogether ?

7. The institution of private property is one of the postulates of modern economic life. When does the need of modifying it in national interest arise ?

8. Explain clearly what constitutes demand for capital. In this light discuss the differences in the rate of interest prevailing in old countries like India, new countries like Australia, and in industrially advanced countries like England.

9. On what occasions and in what manner will an increase of population react unfavourably on the material welfare of a country ? What remedies would you suggest for checking the evils arising out of it ?

10. What are the factors leading to the growth of business ability in a country ? How would you account for the backwardness in business enterprise of certain communities and countries ?

ECONOMICS.

SECOND HONOURS PAPER.

Examiner—A. BROWN, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer SIX *questions.*

The questions are of equal numerical value.

1. Illustrate the connexion between Politics and Economics from the feudal system, and from modern finance and trade and labour legislation.

2. Discuss the attitude of the State to religious opinion and organizations, and explain what measure of State control is necessary in these matters.

3. Apart from contract, what are the most plausible theories of the origin of the State ? Briefly discuss them.

4. *Either*, Explain the nature and sources of Law, showing the difference of ancient, mediaeval and modern, Western and Eastern, ideas and conditions.

Or, What is International Law ? Explain its origin, nature, and content. What is its sanction ? How far is your answer affected by recent military history ?

5. *Either*, What is meant by separation of powers ? How is this doctrine applied in England, France, and the United States ?

Or, ' It has long been a grave question whether any Government, not too strong for the liberties of its people, can be strong enough to maintain its existence in great emergencies ' (LINCOLN). Explain this criticism, and show what can be done to avoid the two evils referred to.

6. *Either*, What are the functions of Government ? Distinguish between those which are essential and those which are optional.

Or, Give a short account of modern Socialism, and illustrate the socialistic tendency in modern legislation.

ECONOMICS.

THIRD HONOURS PAPER.

Examiner—C. J. HAMILTON, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

SIX *questions only to be answered.*

The questions carry equal marks.

1. ' The wider art of wealth which Communism in India represents implies a restatement of the fundamental axioms and postulates of Western Industrial life.'

Carefully discuss the meaning and correctness of this statement.

2. Describe the organization of a typical 'market' for agricultural produce in Bengal. How does it fulfil the conditions of a perfect market as described in Economic theory ?

3. It has been said that the special defect of the Indian Currency system is its *inelasticity*. Explain carefully *why* this is so ; show the disadvantages that arise from it : and suggest a remedy.

4. What are the principal factors upon which the fluctuations in the Exchange value of the Rupee depend ? For what reasons and by what means does Government seek to limit these fluctuations ?

5. Classify the various kinds of Irrigation works used in India. What are the main considerations that have to be taken into account in deciding how far the State can undertake an extension of irrigation in a particular district ? By what means does Government seek to encourage the development of private works ?

6. Describe carefully the Indian Tax system. What are the principles which should govern any extension of taxation in India ?

7. What is meant by the 'Transferability of Occupancy Rights' ? Why has Government imposed certain limits upon these rights ? Discuss the arguments for and against transferability.

8. Explain the origin, extent, and consequences of hoarding in India.

9. Discuss the question of the determination of wages in India. Explain the difficulties attending an inquiry into the annual money wage income and the real income of a wage-earner in this country.

ECONOMICS.

Fourth Honours Paper.

Examiner—G. F. Shirras, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Answer five (*but no more than five*) *questions.*

1. Discuss the present general rise in prices, in reference to
   (a) its causes, and
   (b) its effects.

2. Explain carefully the terms ' nominal wages ' and ' real wages.'
   Describe briefly how you would proceed to show statistically the fluctuation in nominal and real wages over a period of years in the district to which you belong.

3. What bearing, if any, have rent and quasi-rent on prices ?

4. State what is called the quantity theory of money, and distinguish between the cruder forms of the theory and the full statement of the developed theory.

5. Explain the existing Indian monetary system, and the principles upon which it is based. Criticise the following statement : " This system depends for its efficient working upon the maintenance of a favourable exchange."

6. Consider broadly the various methods of giving a preference to inter-imperial trade, and point out the economic difficulties which they respectively present.

7. Discuss the different views as to the advantages of foreign trade. What light does the experience of belligerent and neutral countries since the outbreak of war throw on this problem ?

8. What are the chief principles that are applicable to public loans ? Particular reference should be made to the Indian rupee loan of 1917, especially regarding (*a*) the terms of issue, and (*b*) the period of the loan.

ECONOMICS.

FIFTH HONOURS PAPER.

Examiner—W. C. WORDSWORTH, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

SIX questions only to be answered, including
questions 1 and 2.

The questions carry equal marks.

1. Annotate *four* of the following :—

(*a*) For she is not niggardly, like the smith who fashions the Delphian knife for many uses ; she makes each thing for a single use, and every instrument is best made when intended for one and not for many uses.

(*b*) Money was intended to be used in exchange, but not to increase at interest.

(*c*) Even resident aliens in many places possess such rights, although in an imperfect form : for they are obliged to have a patron.

(*d*) Next we have to consider how by the side of oligarchy the so-called polity or constitutional government springs up, and how it should be organized. The nature of it will be at once understood from a comparison of oligarchy and democracy : we must ascertain their different characteristics, and, taking a portion from each, put the two together, like the parts of an indenture.

(*e*) The mere establishment of a democracy is not the only or principal business of the legislator, or of those who wish to create such a state, for any state, however badly constituted, may last one, two, or three days : a far greater difficulty is the preservation of it.

(*f*) Accordingly we reject the professional instruments and also the professional mode of education in music—and by professional we mean that which is adopted in contests, for in this the performer practises the art, not for the sake of his own improvement, but in order to give pleasure, and that of a vulgar sort, to his hearers.

2. Annotate *three* of the following :—

(*a*) For Prudence is but experience : which equall time, equally bestowes on all men, in those things they equally apply themselves unto.

(*b*) The Lawes of Nature oblige *in foro interno* : that is to say, they bind to a desire they should take place ; but *in foro externo*, that is, to the putting them in act, not alwayes.

(*c*) And Covenants, without the Sword, are but words, and of no strength to secure a man at all.

(d) And consequently they that have already instituted a Commonwealth, being thereby bound by Covenant, to own the Actions, and Judgements of one, cannot lawfully make a new Covenant, amongst themselves, to be obedient to any other, in any thing whatsoever, without his permission

(e) But a man may here object, that the Condition of Subjects is very miserable ; as being obnoxious to the lusts and other irregular passions of him, or them that have so unlimited a Power in their hands.

3. Summarize Aristotle's treatment in the Politics of the art of money-making. How far does he agree with modern theory ?

4. Discuss Aristotle's theory of the function and origin of law. What is his answer to the question, Should the law ever be changed ?

5. 'The quest of empire by a State is hardly the same thing as the quest of tyrannical authority by an individual, and it is one thing for an individual to abstain from active political life and quite another for a State to stand aloof from all relations with other communities ' (NEWMAN). Examine from this point of view Aristotle's theory of the end of the State.

6. Write brief notes on—(a) education at Sparta, (b) the communism of Plato, (c) the Ephors, (d) the function of religious worship in the State.

7. What does Hobbes tell us of the circumstances that tend to the dissolution of a Commonwealth ?

8. What is Hobbes's definition of Civil Law, and what consequences can be deduced from it ? What is the meaning of the statement that unwritten law are Laws of Nature ?

9. ' The Polis . . . has its roots in knowledge and real human need, not in ignorance and terror. Its rules of conduct are based not on obedience to imaginary beings, but on serving mankind ' (GILBERT MURRAY). Amplify and illustrate.

10. What, if any, is the justification of imperialism as represented by—(a) the Roman, (b) the British Empire ? Indicate some of the main differences between these two Empires.

ECONOMICS.

SIXTH HONOURS PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write an Essay on *one* of the following subjects :—   100

(a) The British Constitution as a working machine.
(b) The future relations of England and her Colonies.
(c) Problems of foreign trade.
(d) Indian home industries and their development.

ECONOMICS.

Paper-setters—
$\begin{cases} \text{M. Subedar, Esq., B.Sc. } (London). \\ \text{W. Owsten Smith, Esq., M.A.} \\ \text{S. C. Roy, Esq., M.A.} \end{cases}$

First Pass Paper.

Examiners—
$\begin{cases} \text{J. C. Kydd, Esq., M.A.} \\ \text{Babu Jogischandra Sinha, M.A.} \\ \text{P. Chatterjee, Esq.} \end{cases}$

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer only six questions.

The questions are of equal numerical value.

1. Discuss the relation of Production and Consumption, bringing out clearly how the ultimate control of production lies in the hands of the consumers.

2. ' The standard of living of workmen determines their efficiency. The standard can be maintained at a high level by restricting the size of the family ' Explain this doctrine, and mention any exceptional circumstances of which you can think, in which it will not hold.

3. Discuss the effect of the rate of interest on the growth of capital in a country.

4. How is the value of an article determined ? What is meant by marginal utility ?

5. Parents have a heavy responsibility regarding the choice of occupation by their sons. What evils would result if the parents were led away by mere sentiment or prejudice and did not inquire properly into the prospects ?

6. Consider the social and economic effects of variations in the purchasing power of money.

7. Consider the different economic uses to which land is put, in order of their intensity.

8. Why are the wages of women low compared with the wages of men for the same kind of work or for work requiring the same exertion ?

9. ' The national dividend is a continuous stream from which all the factors of production are rewarded.' Examine this statement, and mention in particular how the owners of land are rewarded.

10. Criticize the following doctrine :—' When giving charity, the rich are only giving back in part what they have stolen from the poor, and for this they deserve no credit.'

ECONOMICS.

SECOND PASS PAPER.

Examiners—
{
P. C. BANERJEE, ESQ., B.Sc. (London).
P. MUKHERJEE, ESQ., M.A.
R. N. GILCHRIST, ESQ., M.A.
}

Candidates are required to give their answers in their own words as far as practicable.

Answer only SIX *questions.*

The questions are of equal numerical value.

1. Attempt a reconciliation of the principal theories of the origin of the State, i.e. show what you believe to be the elements of truth in each.

2. Write a short essay on ' Democracy ', showing what are its advantages and disadvantages, and explain how order and efficiency can best be reconciled with personal liberty.

3. Explain the system of representation in the two houses of the Prussian (not German) legislature before the war.

4. What are the advantages and what the evils of party government ? Can any practical, working alternative be suggested ?   What lessons can be learned from the experience of the Great Powers in recent years ?

5. What do you understand by ' Paternalism ' and ' Laissez-faire ', as applied to systems of government ?   Do you think that the history of the great war has justified either ?

6. Describe briefly the evolution of cabinet government. How does the English ministry differ from those in France and Italy in normal times ? What do you think will be the future of the English cabinet ?

7. Give a sketch of the powers and duties of the President of the United States.

8. Compare the position of the judicature in England, France, and the United States, explaining the constitutional powers of the judges, and the way in which they are appointed.

9. Write notes on ' Nationality', ' Empire ', ' Federal government ', ' Confederation.' Would a universal application of the principle of Nationality be possible or desirable ?

ECONOMICS.

Third Pass Paper.

Examiners— {
J. C. Coyajee. Esq., B.A.
S. C. Bose, Esq.
Dr. P. Banerjee, D.Sc. (*Lond.*).

Candidates are required to give their answers in their own words as far as practicable.

Answer Question 1 *and any* five *of the remaining ten.*

The figures in the margin indicate full marks.

1. Contrast the merits and demerits of the *Khas* and *Zemindari* 20 systems of land revenue settlement in India. Lord Cornwallis discarded the *Khas* system in favour of the *Zemindari* system; while the present-day administrators prefer the former to the latter. Give reasons which have led to this change of views.

2. Enumerate the chief causes of agricultural indebtedness in 16 this country. Give a brief account of the measures taken by Government to provide a remedy for each of these causes.

3. Define clearly the following.:— 16

    (*a*) Cadastral Survey.
    (*b*) Record of Rights.
    (*c*) Countervailing Excise duties.
    (*d*) Alienation of land.
    (*e*) Net assets.
    (*f*) Enfranchised Inam Tenures.
    (*g*) Takavi grants.
    (*h*) Remission and suspension of revenue.

4. Discuss the respective facilities and difficulties of setting up 16 and working a cotton mill in India and in England.

5. State the foundation principles of co-operative credit societies, 16 and discuss the educative effects that flow from the practice of these principles.

6. Estimate the efficacy of the following as remedies against 16 Indian famines :—

    (*a*) Increased irrigation.
    (*b*) Increased transport facilities.
    (*c*) Increased industrialism.

7. State the arguments *for* and *against* the introduction of gold 16 currency in India.

8. What are the principal elements which, according to Marshall, 16 constitute industrial efficiency ? Which of these elements are inherent in Indian character, and which are difficult to assimilate ?

9. The accounts of the Government of India are divided into *four* 16 sections, as follows :—

    (*a*) Revenue account.
    (*b*) Capital account.
    (*c*) Debt and Deposit account.
    (*d*) Balances.

Explain clearly what each of these signifies.

10. Write a brief critical note (not exceeding *five* pages) on the   16
hoarded wealth of India.

11. It is said that in India the rate of interest is not *always* deter-   16
mined by the conditions of supply and demand of capital, and that
the co-operative credit societies are tending to the establishment of
what is called a *market rate* of *interest*.

Expound this proposition.

B.A. & B.Sc. EXAMINATIONS.
1918.

MATHEMATICS.

Paper-setters—
{
THE HON'BLE SIR ASUTOSH MUKHERJEE,
KT., C.S.I., M.A., D.L.. ETC.
THE HON'BLE BABU MAHENDRANATH RAY,
C.I.E , M.A., B.L.
DR. SYAMADAS MUKHERJEE, M.A., PH.D.
RAI ABINASCHANDRA BOSE, BAHADUR, M.A.
BABU INDUBHUSHAN BRAHMACHARI, M.A.,
B.L.
DR. C. E. CULLIS, M.A., PH.D.

FIRST HONOURS PAPER.

Examiner—BHUPATIMOHAN SEN, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

Candidates are permitted to attempt SIX *questions, but not more
than* FOUR *from any group.*

GROUP A.

1. Give a general enunciation of the binomial theorem. Assuming it
to be true for all positive integral indices, prove it generally for all indices.
Find the value of

$$1-\frac{n}{1}\cdot\frac{1+x}{1+nx}+\frac{n(n-1)}{\lfloor 2}\frac{1+2x}{(1+nx)^2}-\frac{n(n-1)(n-2)}{\lfloor 3}\frac{1+3x}{(1+nx)^3}+\ldots.$$

2. The arithmetic mean of the mth powers of n positive quantities is
greater than the mth power of their arithmetic mean in all cases except
when m lies between 0 and 1. Prove this.

Show that

$$\frac{1}{\sqrt{2n+1}}>\frac{1\cdot3\cdot5\ldots(2n-1)}{2\cdot4\cdot6\ldots2n}$$

when n is any positive integer.

3. Show that the expansion of a^x in ascending powers of x is convergent for all values of x.

Test the nature of the series

$$1 + \frac{2^2}{3^2} + \frac{2^2}{3^2} \cdot \frac{4^2}{5^2} + \frac{2^2}{3^2} \cdot \frac{4^2}{5^2} \cdot \frac{6^2}{7^2} + \ldots$$

4. Establish the law of formation of the successive convergents of a simple continued fraction. If $\frac{p_n}{q_n}$ be the nth convergent to a simple continued fraction, show that

$$p_n q_{n-1} - q_n p_{n-1} = (-1)^n.$$

If $\frac{p_1}{q_1}$, $\frac{p_2}{q_2}$ ... be the convergents to

$$1 + \frac{1}{2+} \frac{1}{3+} \frac{1}{4+} \ldots + \frac{1}{n+} \ldots$$

ad infinitum, show that

$$p_n = (n-1)p_{n-1} + (n-1)p_{n-2} + (n-2)p_{n-3} + \ldots + 3p_2 + 2p_1 + 2.$$

5. Find the sum of the first n terms of the series whose rth terms are (1) $\frac{2r+1}{r^2(r+1)^2}$, (2) r^p, where p in (2) is a positive integer.

6. Prove that if two rows or two columns of a determinant are equal, the determinant vanishes.

Obtain the value of the determinant

$$\begin{array}{lll} 1, & bc+ad, & b^2c^2+a^2d^2 \\ 1, & ac+bd, & a^2c^2+b^2d^2 \\ 1, & ab+cd, & a^2b^2+c^2d^2 \end{array}$$

as a product of six factors.

Group B.

7. If any polynomial $f(x)$ changes sign between any two real quantities, an odd number of real roots of the equation $f(x) = 0$ lies between them.

Prove the proposition.

Show that the equation

$$\frac{A^2}{x-a} + \frac{B^2}{x-b} + \frac{C^2}{x-c} = x - d$$

cannot have an imaginary root, where a, b, c are numbers all different from one another.

8. If the sum of three quantities vanish, show that they are the roots of a cubic of the form $x^3 + qx - r = 0$.

If a, β, γ are its roots, find Σa^7 in terms of q and r.

9. *Either*, Obtain the relation between the roots and the coefficients of a general equation of the nth degree.

Or, Find the value of $\Sigma(a-\beta)^2(\gamma-\delta)^2$ in terms of the coefficients, where a, β, γ, δ are the roots of the quartic

$$x^4 - px^3 + qx^2 - rx + s = 0.$$

10. Explain what you understand by a general homographic transformation.

If a, β, γ are the roots of a cubic, prove that the equation whose roots are $\dfrac{\beta\gamma - a^2}{\beta + \gamma - 2a}$, &c., may be obtained by a homographic transformation.

11. Enunciate Sturm's theorem. Find the real positive root of the equation $x^4 - 2x^3 - 3x^2 + 10x - 4 = 0$, correct to three places of decimals.

12. Prove Newton's theorem on the sums of the powers of the roots of an equation of the nth degree.

MATHEMATICS.

SECOND HONOURS PAPER.

Examiner—BHUPATIMOHAN SEN, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Answer EIGHT *questions only.*

The questions are of equal numerical value.

1. Two straight lines which include an angle γ are drawn on an inclined plane, and their inclinations to the horizon are a and β respectively. Find the sine of the inclination of the plane to the horizon.

2. If O and I are the orthocentre and the incentre of a triangle ABC, and if R and r are the radii of the circumscribed and inscribed circles, prove that

$$OI^2 = 2r^2 - 4R^2 \cos A \cos B \cos C.$$

If the inscribed circle touches the sides of the triangle ABC in A', B', C', and if ρ_1, ρ_2, ρ_3 are the circumradii of the triangles $B'IC'$, $C'IA'$, $A'IB'$, prove that

$$2\rho_1\rho_2\rho_3 = Rr^2.$$

3. Determine the coefficients in the expansion

$$\frac{\sin n\theta}{\sin \theta} = A_1 (2 \cos \theta)^{n-1} - A_3 (2 \cos \theta)^{n-3} + A_5 (2 \cos \theta)^{n-5} - \ldots,$$

and also those in the expansion

$$\frac{\sin n\theta}{\sin \theta} = B_1 \cos \theta - B_2 \cos^3\theta + B_3 \cos^5\theta - \ldots$$

when n is an even integer.

4. Resolve $x^{2n} - 2x^n \cos a + 1$ into quadratic factors.

If A, B, C, D, ... are the angular points of a regular polygon of n sides inscribed in a circle whose centre is O, and if P is any point inside the circle, show that

$$PA^2 . PB^2 . PC^2 \ldots = OA^{2n} - 2OA^n . OP^n . \cos n\theta + OP^{2n},$$

where θ is the angle POA.

5. Obtain the exponential values of $\cos\theta$ and $\sin\theta$ when θ is a real angle.

If r and x are numerically less than 1, prove that

$$\log_e \sqrt{1 - 2r\cos\theta + r^2} = -[r\cos\theta + \tfrac{1}{2}r^2\cos 2\theta + \tfrac{1}{3}r^3\cos 3\theta + \ldots],$$

and evaluate the sum

$$1 + (r\sin\theta)\,.\,x + (r^2\sin 2\theta)\,.\,\frac{x^2}{2!} + (r^3\sin 3\theta)\,.\,\frac{x^3}{3!} +.$$

6. Find the sum of the reciprocals of the squares and the sum of the reciprocals of the fourth powers of the odd integers. Hence show that

$$\frac{1}{3^4} + \frac{3}{5^4} + \frac{6}{7^4} + \ldots + \frac{\tfrac{1}{2}n(n+1)}{(2n+1)^4} + \quad .. = \frac{\pi^2}{64}\left(1 - \frac{\pi^2}{12}\right).$$

7. If $S = ax^2 + 2hxy + by^2 + 2gx + 2fy + c$ is an expression of the second degree which can be converted into the form $Ax^2 + By^2 + C$ by a transformation of rectangular coordinates, find A, B, and C. When is a transformation into this form impossible?

Find the conditions that the equation $S = 0$ shall represent two parallel straight lines, and show that the perpendicular distance between the two lines is then

$$2\left[\frac{g^2 - ac}{a(a+b)}\right]^{\frac{1}{2}}.$$

8. Find the equation of the pair of straight lines joining a given point to the points of intersection of a given straight line and a given conic.

Find the envelope of chords of the hyperbola $xy = a^2$ which subtend a given angle at the point (x', y') of the curve.

9. Find the radius of curvature and the coordinates of the centre of curvature at any point of the parabola

$$y^2 = 4ax.$$

Prove that the product of the radii of curvature at the feet of the normals drawn from any point to a parabola is eight times the cube of the distance of that point from the focus.

10. Find the equation representing the pair of tangents which can be drawn from the point (x', y') to a conic represented by the general equation of the second degree. What does this equation become when (x', y') is a focus?

Tangents are drawn to the ellipse

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$

from any point T on a given hyperbola confocal with the ellipse. If 2θ is the angle between these two tangents, show that $\sin\theta$ varies inversely as CD, where CD is the semi-diameter conjugate to CT of the ellipse through T which is confocal with the given ellipse.

11. Find the equations of the tangent and normal at any given point on the conic

$$\frac{l}{r} = 1 + e\cos\theta.$$

Prove that the equation of the director circle of the conic is

$$r^2(1 - e^2) + 2elr\cos\theta - 2l^2 = 0.$$

12. Find the general equation of a conic which has (1) simple contact, (2) three-point contact, (3) four-point contact with a given conic at a given point on it.

Find the equation of the parabola having four-point contact with the ellipse

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$

at the point P whose eccentric angle is ϕ, and prove that its latus rectum is $\frac{2CD^3}{ab}$, where CD is the radius of the ellipse conjugate to CP.

MATHEMATICS.

THIRD HONOURS PAPER.

Candidates are required to give their answers in their own words as far as practicable.

Only SIX *questions to be answered.*

The questions are of equal numerical value.

1. If S be the area of a triangle in a plane σ and S' that of its projection on a plane σ', show that $S' = S \cos \theta$, where θ is the angle between σ and σ'.

Find the area of a triangle the co-ordinates of whose vertices are

$$(0, 0, 0), (x_1, y_1, z_1), (x_2, y_2, z_2).$$

2. Show that the equations of any two straight lines, which do not lie in the same plane, can be reduced to the forms $y = mx, z = c$ and $y = -mx$, $z = -c$, referred to rectangular axes.

Find the surface generated by a straight line which meets the above two straight lines and is perpendicular to a third given straight line.

3. Investigate the condition of perpendicularity of two planes represented by the equations

$$Ax + By + Cz + D = 0 \text{ and } A'x + B'y + C'z + D' = 0.$$

Find the equation of a plane which contains the points $(0, 0, 0)$ and (a, b, c) and is perpendicular to the plane containing the points

$$(0, 0, 0), (b, c, a), (c, a, b).$$

4. Find the general equation of a cone of the second degree passing through the axes of co-ordinates.

Show that $x^2 + y^2 + z^2 - 2yz - 2zx - 2xy = 0$ is a cone which touches the co-ordinate planes.

5. Find the equation of an ellipsoid referred to three conjugate diameters as axes.

A tangent plane to an ellipsoid meets three conjugate diameters at three points equidistant from the centre of the ellipsoid; show that the square of the distance of each point from the centre is equal to the sum of the squares of the semi-axes of the ellipsoid.

6. Show that every section of an ellipsoid is an ellipse.
Find the area of the section of the ellipsoid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$$

by the plane $lx + my + nz = 0$.

7. Show that all points of an ellipsoid, at which the tangent plane passes through a given point O, lie on a plane, the polar plane of O.
Find the equation of the polar plane of any point O lying on a given diameter of an ellipsoid, noticing the special cases when O is taken at the origin and when O is taken at an infinite distance along the diameter.

8. Show that through each point of the paraboloid $x^2 - y^2 = 2z$ two generators can be drawn.
Find the locus of points on the above paraboloid at which the generators are at right angles.

9. Find the conditions that the surface represented by the general equation of the second degree may be a surface of revolution.
Show that $x^2 + y^2 + z^2 + yz + zx + xy = 0$ represents an ellipsoid of revolution the squares of whose semi-axes are 2, 2, $\frac{1}{2}$.

10. Find the direction cosines of the normal at any point (x', y', z') of the ellipsoid in the form $\dfrac{px'}{a^2}$, $\dfrac{py'}{b^2}$, $\dfrac{pz'}{c^2}$, where p is the perpendicular from the centre on the tangent plane at (x', y', z').

The normal at any point P of an ellipsoid meets the principal planes at G_1, G_2, G_3; show that PG_1, PG_2, PG_3 are in a constant ratio.

11. Explain fully how you derive the relations

$$i^2 = j^2 = k^2 = ijk = -1,$$

where i, j, k are three mutually perpendicular unit vectors.

If $\rho = ix + jy + kz$ and $\sigma = ix' + jy' + kz'$ find $S\rho\sigma$ and $V\rho\sigma$.

12. Establish the relation

$$V a(\beta + \gamma) = V a \beta + V a \gamma,$$

and interpret it dynamically.

MATHEMATICS.

Fourth Honours Paper.

Examiner—Dr. Syamadas Mukherjee, M.A., Ph.D.

Candidates are required to give their answers in their own words as far as practicable.

You are permitted to attempt EIGHT *questions only.*

The questions carry equal marks.

1. ·**Find**, by Maclaurin's Theorem, tho first five terms in the expansion of

$$(1+x)^{\frac{1}{x}}$$

in ascending powers of x.

2. Find the limiting value of

$$(a^x + x)^{\frac{1}{x}}$$

when $x=0$.

3. Find a point such that tho sum of the squares of the perpendiculars drawn from it to the sides of a given triangle shall be a minimum.

4. Determine the asymptotes of

$$x^2(x+y)^2 + 2ay^2(x+y) + 8a^2xy + a^3y = 0.$$

5. If tho inverse of a conic be taken, show that tho origin is a doublo point on the inverse curve, and that it is a conjugate point for an ellipse, .a cusp for a parabola, and a node for a hyporbola.

6. Prove that the valuo of the radius of curvature at the origin in the curve

$$6y = 2x^2 + 3xy - 4y^2 + x^3$$

is $\frac{3}{4}$.

7. Perform the integration ·

$$\int \frac{dx}{x^4 - 4x + 3}.$$

8. Prove that

$$(1-e)^{-2k\pi} \int_0^\infty e^{-kx} f(\sin x, \cos x)\, dx = \int_0^{2\pi} e^{-kx} f(\sin x, \cos x)\, dx.$$

9. Prove that

$$\int_0^\infty \frac{\cos \lambda x\, dx}{1+x^2} = \frac{\pi}{2} e^{-\lambda}.$$

10. If an ellipse rolls upon a right line, prove that the area of the path described by a focus in a complete revolution is double the area of the auxiliary circle.

11. Prove that the difference between the whole length of the cissoid

$$(a-x)y^2=x^3$$

and its asymptote $x=a$

is $2a\{\sqrt{3}\log(2+\sqrt{3})-2\}.$

12. Find a function of x which has the value c when x lies between 0 and a, and the value 0 when x lies between a and l.

13. Solve

$$(\tan^{-1}y-x)\frac{dy}{dx}=1+y^2.$$

14. Solve

$$\left(x\frac{dy}{dx}-y\right)\left(x-y\frac{dy}{dx}\right)=2\frac{dy}{dx},$$

and examine the singular solution.

15. Solve

$$x\frac{d^2y}{dx^2}-(2x-1)\frac{dy}{dx}+(x-1)y=0,$$

given that $y=e^x$ is a solution.

MATHEMATICS.

FIFTH HONOURS PAPER.

Examiner—DR. HARIDAS BAGCHI, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

Attempt only FOUR questions from each group.

The questions carry an equal number of marks.

GROUP A.

1. Explain fully the construction and use of the funicular polygon.

2. A heavy uniform rod PQ rests inside a smooth bowl formed by the revolution of an ellipse about its major axis, which is vertical. Show that in the position of equilibrium the rod is either horizontal or passes through a focus.

3. State the principle of Virtual Work.

A pentagon formed of five heavy equal uniform jointed bars is suspended from one corner, and the opposite side is supported by a string from that corner and attached to its middle point, of such length as to make the pentagon regular. Prove that the tension of the string is

$$4W\cos^2\frac{\pi}{10},$$

where W is the weight of any rod. Find also the reactions at the corners.

4. State clearly the part which *friction* plays in causing a rolling instead of a sliding motion.

A heavy uniform bar rests on a rough horizontal table and is pulled in a direction perpendicular to itself by a string attached to a given point of the bar. Find the point about which the bar will begin to turn.

5. The distances of the angular points and intersection of the diagonals of a plane quadrilateral area from any line in its plane are a, b, c, d, and e respectively. Show that the distance of the centre of mass from the same line is

$$\tfrac{1}{3}(a+b+c+d-e).$$

Find the centroid of (1) the surface and (2) the volume formed by the revolution of the cardioid $r = a$ $(1 + \cos \theta)$ about its axis.

6. Determine the form of a uniform cord under the influence of a central repulsive force which varies as the distance from the centre.

GROUP B.

7. Find the accelerations along the tangent and normal to the path of a particle.

A particle possesses a constant acceleration in a direction inclined at a constant angle to the tangent to the curve described by the particle. Find the intrinsic equation of the curve.

8. Indicate the help which Newton received from the works of his predecessors in evolving the three laws of motion. Which of the laws of motion was really due to him ?

9. An imperfectly elastic ball is projected, from a given point in a horizontal plane, against a smooth vertical wall, in a direction making a given angle with the vertical. Find where it strikes the horizontal plane.

The magnitude of the velocity of projection of a particle from a fixed point is constant, but the direction of projection is variable. Investigate the envelope of the various trajectories.

10. Define *simple harmonic motion*, and show that a uniform circular motion is the resultant of two simple harmonic motions.

A point executes a simple harmonic motion of amplitude λ in a period 4π seconds. Find (1) the maximum velocity and (2) the acceleration at full displacement.

11. Write a short note on ' a conservative system of forces.'

Find the work done in stretching an elastic string; in terms of the extension and the initial and final tensions.

12. A particle describes an ellipse under the action of an attraction which is always directed towards a focus. Find the law of attraction.

When the particle is at one extremity of the minor axis a blow is given to it, and its subsequent path is a circle. Find the magnitude and direction of the blow.

MATHEMATICS.

Sixth Honours Paper.

Examiner—Dr. Haridas Bagchi, M.A., Ph.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only FIVE *questions to be attempted, but not more than* THREE *from
any one group.*

The questions are of equal numerical value.

Group A.

1. Define the measure of fluid pressure.
Prove that the pressure at any point of a fluid at rest is the same in all directions.
A triangle ABC is exposed to fluid pressure, and it is found that if any straight line PQ be drawn parallel to BC, and at a distance x from A, the pressure on the area APQ is $px^3 + q$, where p and q are constants. Find the pressure at A and at any point on the line BC.

2. Establish the formula $p = g\rho z$, explaining the notation.
If the density of distilled water be the unit of density and 1 foot per second be the unit of velocity, find the units of space and time in order that the above formula may give the pressure in ounces.

3. A solid cone is floating in water with its axis vertical and vertex downwards. To cause it to sink until three-fourths of the axis is immersed requires a load of 50 grammes, and to cause four-fifths of its axis to be immersed requires a load of 96 grammes. Show that the specific gravity of the cone is 0·324 in comparison with that of water.

4. Show that the pressure in a given horizontal direction on any surface immersed in a heavy liquid can be obtained by projecting orthogonally the surface on a vertical plane.
Deduce that the resultant pressure on a closed surface is vertical.
Show that the resultant of uniform normal pressure, P, exerted over the convex surface of a hemisphere of radius a, is $\pi a^2 P$ perpendicular to the plane face.

5. Define Metacentre.
A rectangular lamina of sides $2a$ and $2b$ and of density ρ is floating with the side $2b$ vertical in a liquid of density σ; it receives a small angular displacement in the vertical plane, so that the volume of the liquid displaced remains the same. Find the position of the metacentre, and prove that the condition for stability is

$$\frac{a^2}{6b^2} > \frac{\rho}{\sigma} - \frac{\rho^2}{\sigma^2}.$$

6. Describe the mercurial barometer, and show how to graduate it.
The readings of a faulty barometer, in which there is some air, are a and b when the true readings are α and β. Find the true reading when the faulty barometer reads c.

GROUP B.

7. Represent on the celestial sphere the approximate positions of the Sun and Moon on August 19 at 8 p.m , given the following data:—

Latitude of the place $=50°$N.

Moon's age at *noon* on August 19=14 days 19 hours.

Moon's latitude $=2°$S.

Show that in Lat. 45°N. the interval between the time of any star's passing due east and its setting is constant.

8. Explain the phenomenon of twilight, and show that its duration depends on the latitude of the place and the declination of the Sun.

Show that twilight lasts all night at latitude 48° 50' *only* for several nights before and after the summer solstice.

9. State Kepler's three celebrated laws of planetary motion.

Deduce from the Second Law that the combined length of spring and summer is greater than that of autumn and winter.

How is the eccentricity of the Earth's orbit determined, and what is it approximately ?

10. Explain ' equation of time ' and show graphically that it vanishes four times in the year.

11. Find the mean solar time corresponding to a given instant of sidereal time at Greenwich.

If a and a' are the hour-angles in degrees of the Sun at Greenwich, at t and t' hours mean time, show that the equation of time at the preceding mean noon, expressed in fraction of an hour, is

$$\frac{a't-a't'}{15\,(t'-t)}.$$

12. Show how to find the longitude at sea by the chronometer.

Given the Sun's computed hour-angle to be 75°E. when the chronometer indicated 23 hrs. 7 min. 31 sec., find the longitude, the equation of time being +3 min. 55 sec. and the correction for clock error and rate being −1 min. 18 sec.

Explain what is meant by ' clock error and rate.'

MATHEMATICS.

Paper-setters— $\Big\{$ The Hon'ble Sir Asutosh Mukherjee, Kt., C.S.I., M.A., D.L., etc.
Dr. Haridas Bagchi, M.A., Ph.D.
Rai Abinaschandra Bose, Bahadur, M.A.

First Pass Paper.

Examiners— $\Big\{$ Babu Harilal Chaudhuri, M.A.
Babu Surendramohan Ganguli, M.Sc.
J. M. Bose, Esq., M.A.

*Candidates are required to give their answers in their own words
·as far as practicable.*

Answer any TEN *questions.*

The questions are of equal numerical value.

1. Obtain a formula for all angles whose cosine is equal to a given quantity, and solve the equation

$$2 \cos^2 x - 3 \cos x + 1 = 0.$$

2. Prove that the two equations

$$\sin^{-1} x = 60°$$

and $$4x^2 - 3 = 0$$

have a common solution, and find it.

3. Establish the formula

$$\tan^{-1} x + \tan^{-1} y = \tan^{-1} \frac{x+y}{1-xy},$$

and simplify this when $xy = 1$.

4. Find the radii of the escribed circles of a triangle in terms of its sides.
    The sides of a triangle are 5 ft., 8 ft., and 5 ft. respectively. Prove that two of the escribed circles are equal.

5. Prove De Moivre's formula

$$\cos n\theta + i \sin n\theta = (\cos \theta + i \sin \theta)^n,$$

when n is a positive integer. Consider, in particular, the case when $n = 2$, and *hence* verify the identities

$$\cos 2\theta = \cos^2\theta - \sin^2\theta,$$
$$\sin 2\theta = 2 \sin \theta \cos \theta.$$

6. Show that $\sin x = x - \dfrac{x^3}{\underline{|3}} + \dfrac{x^5}{\underline{|5}} - \ldots$, where x is the circular measure of an angle.
    Write down the series for $\sin 11° 15'$.

7. Prove that $\sin x = \dfrac{e^{\iota x} - e^{-\iota x}}{2\iota}$, where $\iota^2 = -1$. What form does this relation assume when x is a multiple of two right angles ?

8. Calculate the distance between two points whose Cartesian coordinates are (r_1, y_1) and (x_2, y_2).

Can you find a point equidistant from the four points $(a \cos a, a \sin a)$, $(a \cos \beta, a \sin \beta)$, $(a \cos \gamma, a \sin \gamma)$, and $(a \cos \delta, a \sin \delta)$?

9. Determine the condition that the two straight lines

$$y = m_1 x + c_1 \text{ and } y = m_2 x + c_2$$

may be parallel.

If $y = \tan a \cdot x$ and $y = x$ are parallel lines, prove that $a = (4n + 1)\dfrac{\pi}{4}$, where n is an integer, positive or negative.

10. Plot the positions of the points

$$(a, a), (-a, a), (-a, -a), (a, -a),$$

and show that they form a square circumscribed about the circle

$$x^2 + y^2 = a^2.$$

11. Find the centre and radius of the circle

$$x^2 + y^2 + 2gx + 2fy + c = 0,$$

and also the area of an equilateral triangle inscribed in it.

12. Express the general equation of a tangent to the parabola $y^2 = 4ax$ in the form $y = mx + \dfrac{a}{m}$, and derive the equations of the two tangents which are equally inclined to the coordinates axes.

13. If ϕ denote the eccentric angle of a point on the ellipse $\dfrac{x^2}{a^2} + \dfrac{y^2}{b^2} = 1$, show that the coordinates of the point may be written $(a \cos \phi, b \sin \phi)$.

The distance of a point on the conic $\dfrac{x^2}{6} + \dfrac{y^2}{2} = 1$ from the centre is 2. Find the eccentric angle.

14. Write a short note on the hyperbola $\dfrac{x^2}{a^2} - \dfrac{y^2}{b^2} = 1$, explaining clearly how it consists of two *distinct* infinite branches. Prove that the above hyperbola represents the locus of the *variable* point $(a \sec \theta, b \tan \theta)$, where θ is a parameter.

MATHEMATICS.

SECOND PASS PAPER.

Examiners— $\begin{cases} \text{BABU RAICHARAN BISWAS, M.A.} \\ \text{BABU SATISCHANDRA BOSE, M.A.} \\ \text{BABU MANMATHANATH RAY, M.A.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

Attempt only TEN *and no more than* TEN *questions.*

The figures in the margin indicate full marks.

1. Find from first principles the differential coefficient of cos x.   10

If $\qquad \cos y = \dfrac{b + a \cos x}{a + b \cos x}$, find $\dfrac{dy}{dx}$.

2. If $y = x^4 \log x$, prove that   10

$$\frac{d^6 y}{dx^6} + \frac{24}{x^2} = 0.$$

- 3. Enunciate Taylor's Theorem.   10
   Find the first three terms in the expansion of tan x in ascending powers of x.

4. Divide the number 8 into two such parts that (1) the sum of   10 the squares of the two parts may be a minimum, and (2) the product of the two parts may be a maximum.

5. Prove that the subtangent is of constant length in the curve   10

$$\log y = x \log a.$$

6. Prove that the polar subnormal is constant in the curve   10

$$r = a\theta.$$

7. Find the radius of curvature at any point on the parabola   10

$$x^2 = 4my.$$

8. Perform the integrations: 10

$$(1) \quad \int \sqrt{\frac{a+x}{a-x}}\, dx\,; \qquad (2) \quad \int \frac{dx}{x^2 - x - 6}.$$

9. Perform the integrations: 10

$$(1) \quad \int e^x x^2\, dx\,; \qquad (2) \quad \int \frac{x\, dx}{x^2 + 2x - 3}.$$

10. Prove that   10

$$\int_a^\beta \sqrt{(x-a)(\beta-x)} = \frac{\pi}{8}(\beta-a)^2.$$

Or,

$$\int_0^{\cdots} e^{-ax}\sin mx\, dx = \frac{m}{a^2+m^2}.$$

11. Calculate the area of the ellipse   10

$$\frac{x^2}{a^2}+\frac{y^2}{b^2}=1.$$

12. Find length of the logarithmic curve   10

13. Define the intrinsic equation of a curve, and obtain it for the   10
cardioid $r=a(1-\cos\theta)$.

14. Solve   10

$$\frac{dy}{dx}+\frac{y}{x}=x^2.$$

15. Solve   10

$$2x\frac{dy}{dx}+\left(\frac{dy}{dx}\right)^2=0.$$

MATHEMATICS.

THIRD PASS PAPER.

Examiners— { BABU RAJANIKANTA BARAT, M.A.
BABU SARADAPRASANNA DAS, M.A.
BABU SUDHANSUKUMAR BANERJEE, M.Sc.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only NINE *questions to be attempted, but not more than* SIX *from
any one group.*

The questions are of equal numerical value.

GROUP A.

1. Establish the formula $W=Vs\omega$, explaining the notation.
Show how to find the specific gravity of a mixture of given weights of
different substances whose specific gravities are given.

2 Describe Bramah's Press, and state the hydrostatic principle it
exemplifies.

30

3. If two liquids which do not mix together meet in a bent tube, the heights of their upper surfaces above their common surface will be inversely proportional to their densities. Prove this.

Is the bent tube required to be of uniform bore ?

4. An equilateral triangle is vertically immersed in water with one side in the surface, which is exposed to atmospheric pressure. Find the resultant pressure on the triangle, given that the length of a side is 3 feet, the pressure of the atmosphere is 15 pounds-weight to the square inch, and the mass of 1 cubic foot of water is 62·5 pounds.

5. Define Centre of Pressure.

A rectangle is immersed vertically in a heavy homogeneous liquid with two of its sides horizontal and at depths a and b below the surface. Find the depth of the centre of pressure.

6. Find the conditions of equilibrium of a heavy body freely floating in a liquid.

An elastic bladder containing air just floats at the surface of the sea. What will happen if it be plunged to a great depth in the sea and then released ?

7. What is meant by the ' height of the homogeneous atmosphere ' ?

Calculate this height, given that the specific gravity of air is 0·0013, the specific gravity of mercury is 13·596, the height of the mercury barometer is 30 inches, and the weight of a cubic foot of water (the standard substance) is that of 62·5 pounds.

8. A wine-glass, in the shape of a hollow right circular cone, 4 feet in height, is lowered mouth downwards into water till the level of the water inside is 34 feet below the surface. What is the height of the part of the cone now occupied by air, the height of the water barometer being 34 feet ?

9. Describe the common hydrometer, and show how it is graduated.

10. A uniform rod is suspended by two vertical strings attached to its extremities, and half of it, from one extremity, is immersed in water. If its specific gravity be s, find the ratio between the tensions of the strings.

GROUP B.

11. Define ' right ascension,' ' declination,' ' altitude,' ' azimuth,' and ' hour angle.' State how they are measured on the celestial sphere.

Prove that the altitude of the celestial pole at any place is equal to the latitude of the place.

12. Describe the transit circle, and show how to find the zenith point.

13. What is meant by ' coefficient' of atmospheric refraction ?

Give Bradley's method of determining it.

14. How is the annual apparent path of the Sun, as observed from the Earth, traced on the celestial sphere ?

From what observations is it established that the apparent path of the Sun round the Earth is not circular ?

15. Explain graphically what, in the case of a planet, is meant by ' superior conjunction,' ' inferior conjunction,' ' opposition,' ' nodes,' and ' elongation.'

What are the limits respectively for the elongation of a superior and an inferior planet ?

What are the conditions for the transit of an inferior planet across the Sun's disc ?

16. State Kepler's Third Law, and deduce it from the law of gravitation.

17. What is meant by the ' geocentric parallax' of a heavenly body ?
Given that the Sun's horizontal parallax is 8·8″, find the Sun's distance
from the Earth, the radius of which is 3,960 miles approximately.
18. Give Flamsteed's method of finding the right ascension of a star,
and explain its advantages.
19. Define the Moon's ' synodic' and ' sidereal' periods, and find the
' sidereal period,' given that the synodic period consists of 29½ days.
20. Given the sidereal time at any instant at Greenwich, establish
the formula giving the mean time at that instant.
What do you understand by ' mean Sun' ?

PHYSICS.

Paper-setters—
(Pass and Honours).

{ DR. P. J. BRUHL, D.Sc., I.S.O., F.C.S.
C. V. RAMAN, ESQ., M.A.
DR. D. N. MALLIK, B.A., SC.D.
RAI B. N. DAS BAHADUR, M.A., B.SC.
BABU TULSIDAS KAR, M.A.
D. B. MEEK, ESQ., M.A., B.SC.

FIRST HONOURS PAPER.

*Examiner—*JNANCHANDRA GHOSH, ESQ., M.A.·

*Candidates are required to give their answers in their own words
as far as practicable.*

Attempt not more than SIX *questions, of which at least* THREE *should
be from Group A.*

The questions carry equal marks.

GROUP A.

1. Describe Poynting's determination of the mean density of the Earth
by the aid of the common balance, giving sketches of the apparatus, and
the theory.
2. A steel wire 231·1 cm. in length and 0·217 mm. diameter hangs
vertically under a load of 2,245 grammes attached to one end. This load
when disturbed in a vertical direction is found to execute 6·20 vibrations
per second. Calculate Young's modulus for the wire.
3. Mention the principal methods that have been used for a determin-
ation of the surface-tension of water, and describe *one* of them fully, giv-
ing the theory and the practical details necessary for accuracy.
4. Two solid spheres of brass impinge directly on each other. State
what is known experimentally as regards the phenomena resulting from
such impact. Does any loss of energy occur ? If so, what is it due to ?
5. State the experimental laws of solid friction, and explain why it is
possible to excite the vibrations of a tuning-fork or of a Chladni's plate
by the friction of a bow.

6. You are supplied with two forks, the frequency of one of which may be varied by sliding weights fixed on its prongs. Describe how you would proceed to adjust the ratio of their frequencies to be equal to a specified fraction, say 2 : 3, with the greatest possible accuracy.

7. What are the characteristics of a sustained musical note ? Illustrate your answer by explaining how such a note may be produced by a stringed instrument.

8. Describe and explain the interference phenomena observed round the prongs of a tuning-fork.

9. Explain why sound-waves suffer reflection when they arrive at a surface at which the density of the medium alters. Does any change of phase occur ?

10. Assuming that the pressure-changes in air are given by Boyle's law $pv =$ constant, the velocity of sound may be calculated, but is found to disagree with the observed value. Explain this, and show how the correct velocity may be calculated theoretically.

PHYSICS.

SECOND HONOURS PAPER.

Examiner—D. B. MEEK, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Answer Questions 1 and 2 and any other FOUR.

The figures in the margin indicate full marks.

1. Explain what is meant by steam line, ice line, and hoar-frost   16
line. Show that these lines are concurrent. Draw the lines for a substance that contracts when it solidifies.

2. A glass globe contains unsaturated moist air, and the pressure   16
is so adjusted that on opening a stop-cock communicating with the external air a very slight cloudiness is produced. Show that, if the initial and final pressures of the air and its hygrometric state are known, the ratio of the specific heats for the moist air can be calculated.

3. Obtain Van der Waal's equation as a corrected form of   17
$$pv = R\theta.$$
Find the critical temperature, critical volume, and critical pressure in terms of the constants of the equation.

4. State the First Law of Thermodynamics, and write a note on   17
the experimental determination of the mechanical equivalent of heat.

5. Write a note on the liquefaction of gases, giving both the theory   17
and the details of the apparatus employed.

6. Describe the working of Carnot's reversible heat engine.   17
Define the efficiency of an engine. and prove that all reversible engines taking in equal quantities of heat and working between the same temperatures are equally efficient.

7. Explain Lord Kelvin's absolute scale of temperature, and show 17
that temperatures measured on this scale will agree with the values of
temperatures given by the perfect gas thermometer.

8. Write a note on the internal-combustion engine, giving as many 17
details of construction as possible.

PHYSICS.

THIRD HONOURS PAPER.

Examiner—P. MAHALANOBIS, ESQ., B.SC., B.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

*Answer FIVE questions, of which TWO at least must be from either
Group A or Group B.*

The questions carry 20 marks each.

GROUP A.

1. Investigate the path of a ray refracted through a prism, the ray
making an angle with the principal section of the prism.

2. Show that in the case of a number of lenses in contact the algebrai-
cal sum of the reciprocals of their respective focal lengths is equal to
the reciprocal of the focal length of the equivalent lens.

3. Investigate the case of achromatic combinations of lenses in contact.
A compound achromatic lens is to be manufactured having a focal length
of 50 cm., the surfaces of contact of the crown and flint-glass lenses having
a common radius of 30 cm. The dispersive powers of crown and flint glass
being taken as 0·22 and 0·46, and the refractive indices for the middle of
the spectrum assumed as 1·52 and 1·63 respectively, calculate the radii of
curvature of the second faces of the two lenses.

4. Give details regarding the instrumental outfit required to investigate
the ultra-red portion of the spectrum of the light emitted by an arc lamp.

5. What are the 'cardinal points' of a thick lens? What problems
can be solved by making use of the properties of nodal points? How can
the position of the nodal points of a given thick lens be determined experi-
mentally?

6. Investigate the achromatism of Huyghens's eye-piece. Why is this
eye-piece used in microscopes and not in telescopes?

GROUP B.

7. Characterize the different methods of producing interference fringes.

8. Investigate the case of diffraction at a straight edge.

9. Give an account of Sellmeier's theory of dispersion, and obtain
Sellmeier's dispersion formula and apply it to the case of infinitely short
waves and infinitely long waves.

10. Find an expression for the resolving power of a grating.

11. Explain the colour phenomena observed when thin plane-parallel
plates of quartz of various thicknesses cut parallel to the crystallographic
chief axis are viewed between crossed nicols.

PHYSICS.

FOURTH HONOURS PAPER.

Examiner—DR. D. N. MALLIK, B.A., SC.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

Not more than SIX questions to be attempted.

The questions are of equal numerical value.

1.   Define ' Electric Field.'   How would you represent the characteristic
properties of (*a*) a uniform, (*b*) a variable field ?   An insulated and hollow
conducting sphere is introduced into a uniform field.   Draw a careful
diagram of the resulting field.
Deduce from your diagram the measure of the charge on the sphere and
the potential inside the sphere.

2.   Explain the theory of the attracted disc electrometer, carefully
explaining, by means of a diagram or otherwise, the action of the guard
plate.
How does the energy change, if the distance between the attracting
systems in this electrometer is changed ?

3.   Define ' potential.'   In what connexions is the word used ?   Clearly
explain its physical meaning in these cases.
Find the potential of a small bar magnet, and deduce its action on a
magnetic pole placed at any point.

4.   Define unit current in absolute measure, and explain on what funda-
mental definitions the ' ohm ' is based.
Describe how a standard resistance may be constructed.

5.   Explain on the principle of energy the phenomenon of electromag-
netic induction.   Show from general considerations that the coefficient
of self-induction is of the dimensions of a resistance.
Describe an experiment by which the phenomenon of self-induction
may be made manifest.

6.   Describe, as completely as you can, the phenomena (reversible and
irreversible) occurring in a primary cell.
How would you modify Ohm's law in order to take account of
these ?

7.   Define thermo-electric power.   If the thermo-electric power of any
two metals is of the form $a + bt$, where t is the temperature, find the E.M.F.
of a couple made up of those two metals, between given temperatures.
Is there any relation between a and b ?   What will be the corresponding
Peltier effect ?   .

8.   Investigate the effect of a circular current on a magnetic pole,
placed at a given distance from its centre.
A vertical coil of twenty turns and of 2 centimetres radius is placed
at an inclination of 30° to the plane of the magnetic meridian.   If a cur-
rent of one ampère passes through the coil, find the force which it exerts
on a unit pole placed at a distance of 20 centimetres from its centre.   Also
find the inclination to the magnetic meridian of a small magnet suspended

at the same distance, due to the joint action of the coil and the earth's magnetism.

$$(H=0\cdot18.)$$

9. Describe a frictional machine and a Ruhmkorff's coil, and compare their actions.

Compare a few typical experiments that can be performed with the two apparatus.

PHYSICS.

FIRST PASS PAPER.

Examiners—$\begin{cases} \text{BABU SURENDRANATH GHOSH, M.A.} \\ \text{BABU PURNACHANDRA KUNDOO, M.A.} \end{cases}$

Answer Question 4, another question of group B, and TWO *questions from each of the groups A and C.*

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks

GROUP A.

1. Define the terms wave-length, amplitude, and frequency. 16 Assuming that the velocity of a water-wave of wave-length λ is given

by the formula $v^2 = \dfrac{g\lambda}{2\pi}$, calculate the velocity and frequency of a

wave when the distance from one crest to the next is observed to be 55 ft. What are stationary waves, and what is the difference between them and ordinay waves ? Illustrate your answer with neat pencil sketches on squared paper. Define the terms nodes and loops, and explain how they are formed.

2. Define the term 'Intensity' of an electric field, and prove that 16 near to the surface of a hollow conductor it is equal to 4 π times the surface density of the charge ? also define *electrostatic pressure*, and

prove that it is equal to $\dfrac{F^2}{8\pi}$ where F denotes the intensity of the field

just outside a hollow charged conductor

3. Give a general definition of the term Elasticity, and prove that, 16 in the case of a gas, the elasticity at constant temperature is numerically equal to the pressure. Calculate in C.G.S. units the value of Young's modulus, in the case of a wire, from the following data :—

Mean extension for 6 kgm.	=0·537 mm.
Radius of wire	=0·675 mm.
Length of wire	=250 cm.

GROUP B.

4. Describe some form of constant volume air-thermometer. Give 20 in detail the mode of using it and working out the observations made

so as to get the most accurate result. Are the coefficients of increase of pressure of different gases identical with their respective coefficients of expansion under constant pressure, and is any of these coefficients the same for all gases ? What general conclusions have been drawn from a comparison of these coefficients ?

5.   Define relative humidity, and describe a method of determining   16
it.

A cubic metre of air at 20° is found to contain 11·56 grammes of aqueous vapour. What is the relative humidity of this air, the maximum pressure of aqueous vapour at 20° being 17·39 mm. ?

6.   Define the term mechanical equivalent of heat, and briefly des-   16
cribe a method of determining it.   Give its value in foot-pounds and in C.G.S. units.

A cannon ball, the mass of which is 100 kilograms, is projected with a velocity of 500 metres per second. Find in C.G.S. units the amount of heat which would be produced if the ball were suddenly stopped.

GROUP C.

7.   Deduce the condition for minimum deviation of a ray of light   16
passing through a prism, and describe fully how the index of refraction of the material of a prism can be determined.

8.   Describe the compound microscope.   Trace the path of rays   16
through such an instrument.   Obtain an expression for its magnifying power.

9.   Describe simple experiments to illustrate the phenomena of   16
double refraction and polarization.   How would you show that light becomes polarized by double refraction ? Explain how experiments on polarization lead to the conclusion that the light vibrations are transverse.

PHYSICS.

SECOND PASS PAPER.

Examiners—⎰ RAI KUMUDINIKANTA BANERJEE, BAHADUR,
            ⎱ M.A.
            ⎱ BABU RAMENDRANATH GHOSH, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions are of equal numerical value.

Only SIX *questions to be attempted.*

1.   Obtain an expression for the velocity of sound in air, in terms of the pressure and the density.

Calculate the velocity of sound in air at 30° C., when the barometric height (corrected) is 755 mm.

$$a = 0.00367 \qquad \gamma = 1.4.$$

2. Distinguish clearly between stationary waves and progressive waves.

Explain, graphically or mathematically, the formation of nodes and antinodes, when two trains of exactly similar waves travel along the same line from opposite directions.

3. Explain Doppler's principle, and describe how it can be easily demonstrated.

Two trains are approaching from opposite directions with the same speed of 100 ft./sec. The whistle of the first train is of frequency 1024. Find the variation of the apparent pitch calculated by an observer in the second train as the trains pass, supposing there is no wind and that the velocity of sound in air is 1100 ft./sec.

4. Describe the deflexion method of comparing the magnetic moments of two magnets by the magnetometer, explaining the adjustments in detail.

5. Explain how to find the dip with the dip circle. What are the possible sources of error, and how are they avoided ?

6. Define 'line of force' and 'unit tube of force.' What are the physical properties attributed to the tubes of force ? Show, in some simple cases, that these properties are sufficient to explain the phenomena of electric attraction and repulsion. Explain clearly how from the distribution of these tubes the intensities at different parts of the field may be compared.

7. Prove that the potential due to a uniformly charged sphere at any external point is the same as if the whole charge were collected at the centre.

A sphere of radius 3 cms., and charged to a potential of 9 C.G.S. units, is placed with its centre A at a distance of 118 cms. from the centre B of another sphere of radius 4 cms. and charged to a potential of 8 C.G.S. units. Find the potential at O in AB, such that OA is 54 cms.

8. Explain the theory and the method of measuring resistances by the metre bridge. What are the chief sources of error, and how are these errors eliminated ?

9. Explain the theory and the method of measuring the E.M.F. of a cell by the potentiometer. Indicate how the instrument can be used for current and resistance measurements.

10. Prove the relation between electric energy and calorie.

A current of 2 amperes is sent for ten minutes through a coil of resistance 10 ohms, immersed in 500 grammes of water in a calorimeter of water equivalent 10 grammes. The rise of temperature of the water, after correcting for radiation, is 11·8°C. Calculate the value of J.

11. State Lenz's law on the direction of induced currents, and show that it follows from the principle of the conservation of energy.

Why are the oscillations of the coil of a D'Arsonval galvanometer damped by short-circuiting it ? Is there any damping effect on short-circuiting a needle galvanometer ? What method of damping is chiefly used in aperiodic needle galvanometers ?

PRACTICAL PHYSICS.

In Calcutta, no candidate shall be examined in the College in which he has worked. Each centre is complete in itself, and the candidates at each centre shall be examined only by examiners appointed for that centre.

Examiners—

HONOURS.

DR. D. N. MALLIK, B.A., SC.D., F.R.S.E.,— *Convener.*

RAI KUMUDINIKANTA BANERJEE, BAHADUR, M.A.

P. MAHALANOBIS, ESQ., B.SC., B.A.

D. B. MEEK, ESQ., B.SC.

PASS.

DR. D. N. MALLIK, B.A., SC.D., F.R.S.E.,— *Convener.*

PRESIDENCY COLLEGE CENTRE.

BABU HRIDAYCHANDRA BANERJEE, M.A.

BABU PURNACHANDRA BHATTACHARYYA, M.A.

SCOTTISH CHURCHES COLLEGE CENTRE.

BABU NIBARANCHANDRA RAY, M.A.

BABU DWIJENDRAKUMAR MAJUMDAR, M.A.

ST. XAVIER'S COLLEGE CENTRE.

REV. FATHER BRIOT, S.J.

BABU TULSIDAS KAR, M.A.

DACCA COLLEGE CENTRE.

W. A. JENKINS, ESQ., M.SC.

BABU TARAKADA MUKHERJEE, M.A.

GAUHATI COLLEGE CENTRE.

D. E. ROBERTS, ESQ., M.SC.

BABU KAMADACHARAN CHAKRABARTI, M.A.

RAJSHAHI COLLEGE CENTRE.

BABU BAMACHARAN BHATTACHARYYA, M.A.

SURENDRANATH MAITRA, ESQ., M.A., A.R.C.S.

RANGOON COLLEGE CENTRE.

K. M. WARD, ESQ., B.A.

N. C. K. AIYER, ESQ., M.A.

BERHAMPORE COLLEGE CENTRE.

MR. ADINATH SEN. M.A., B.SC.

BABU NRIPENDRANATH DE, M.A., B.SC.

HONOURS PAPER.

1. Find how the surface tension of the given liquid will vary with concentration.

2. Find the moment of inertia of the given body.

3. Find g by Kater's pendulum.

4. Find the vapour density of the given liquid by Victor Meyer's method.

5. Find the densities of water at different temperatures by a weighted bulb. Draw the graph and calculate the average coefficient of expansion of water.

6. Find the change in the specific heat of water by the addition of known proportions of salt.

7. Find the change in the specific heat of the given liquid with temperature by Joule's calorimeter.

8. Two tuning forks are given: Determine the frequency of one of them directly and then deduce that of the other by finding the number of beats produced.

9. Find by the spectrometer the variation of the angle of deviation of a ray through a prism with the angle of incidence. Represent the result graphically and calculate the refractive index of the material of the prism.

10. Find the number of lines per unit length of the given grating with a known wave-length.

11. Calibrate the given spectroscope for wave-length measurements, using the given salts or the given vacuum tube. (*Salts*—sodium, potassium, lithium, and calcium. Vacuum tube –Hydrogen or Helium).

12. Find the variation in the refractive index of salt solution of different concentrations by the hollow prism method.

13. Find " H " by the reflecting magnetometer.

14. Calibrate the wire of the given metre-bridge by Carey-Foster's method.

15. Find the temperature coefficient of resistance of the given wire with the metre-bridge, taking all possible precautions.

16. Find the temperature coefficient of the given wire by a potentiometer method.

17. Find the variation of resistance with concentration of the solution of the given salt by Kohlrausch's method. Plot the result graphically.

18. Find the value of J by an electric Calorimeter, measuring the current by a copper voltameter and making corrections for radiation.

19. Determine the variation of E.M.F. of an iron-copper couple with temperature, between 0·C and 100·C. Plot a curve and hence determine the coefficient of increase of E.M.F. for the same range.

20. Construct one one-ohm coil and compare it with a standard one-ohm coil by Carey-Foster's method.

21. Given a nominal one-ohm coil, whose value is higher than the marked value. Construct a shunt which will bring it to the standard value.

22. Trace the equipotential lines on the given tin foil of circular section with electrodes at two points on the circumference.

PRACTICAL PHYSICS.

PASS PAPER.

The Examinations last for SIX *hours* (11 A.M. *to* 5 P.M.).

Two questions, the total value of which is 80, are to be given out by lottery.

1. Find the average cross section of the given wire by the hydrostatic balance, making corrections for the temperature of water. Check the result by the screw gauge.

2. Determine the periods for different lengths of a simple pendulum. Draw the L–T graph and find, from the graph, the length of the seconds-pendulum.

3. Find accurately Young's Modulus for the given wire.

4. Find the density of the given liquid by the hydrostatic balance method, making corrections for the temperature of water.

5. Find, by the hydrostatic balance, the specific gravity of the given solid, soluble in water, making corrections for the temperature of water.

6. Find accurately the volume per gram of the given powder.

7. Find the volume of the air cavity of the given hollow solid, which sinks in water. (A sample of the substance must be given).

8. Determine by the resonance column method, the velocity of sound i n moist air at the temperature of the room, eliminating the end effect. Hence find the frequency of the given fork.

9. Draw a graph giving the relation between the frequency and length of vibrating string (under given tension). Hence deduce the frequency o f the given fork.

10. Determine by the sonometer the frequency of the given tuning fork.

11. Measure, with travelling microscopes, the mean co-efficient of expansion of the given rod or tube, between the room temperature and that of boiling water.

12. Establish the relation between the pressure and temperature of a mass of air at constant volume. Draw the graph and calculate the pressure co-efficient.

13. Establish the relation between the volume and temperature of a mass of air at constant pressure. Draw the graph and calculate the coefficient of expansion.

14. Find the specific heat of the given solid (glass or marble) by the method of mixtures, making corrections for radiation.

15. Find, by the method of mixtures, the specific heat of the given liquid (mustard oil), using copper as a substance of known specific heat, making corrections for radiation.

16. Find, by the method of mixtures, the latent heat of fusion of ice correcting for radiation.

17. Measuring the focal length and the curvatures of the two surfaces o f the given double convex lens, calculate the refractive index of its material.

18. Given a pin, a telescope and scale and a spherometer, find the index of refraction of the material of the lens.

19. Find by two different methods the focal length of the given convex lens.

20. Draw the *u/v* curve for the given lens and from the graph findi ts focal length.

21. Find the focal length of the given concave lens, using an auxiliary convex lens.

22. Determine the magnifying power of the given telescope for infinity.

23. Determine the refractive index of the given liquid by the microscope. (Different thicknesses of the liquid to be taken and the experiment repeated).

24. Determine, by the spectrometer, the refractive index for sodium light of the material of the given prism.

25. Compare the magnetic moments of the two given magnets by the deflection method.

26. Find, with a copper voltameter, the reduction factor of the given tangent galvanometer.

27. Verify, with a P.O. Box, the relation,

$$\frac{1}{R} = \frac{1}{r_1} + \frac{1}{r_2}.$$

28. Find, by the metre bridge, the specific resistance of the material of the given wire.

29. Compare the E.M.F's of the two given cells by the potentiometer.

CHEMISTRY.

Paper-setters—
(Pass and Honours).

Rai Chunilal Basu, Bahadur, M.B., I.S.O., F.C.S.
Jatindranath Sen, Esq., M.A.
R. N. Sen, Esq., M.A.
Babu Chandrabhushan Bhaduri, B.A.
Sir P. C. Ray, Kt., C.I E., D.Sc., Ph.D.
Babu Ramendrasundar Trivedi, M.A.

First Honours Paper.

Examiner—Sir P. C. Ray, Kt., C.I.E., D.Sc., Ph.D.

Candidates are required to give their answers in their own words as far as practicable.

Attempt no more than five questions.

The questions are of equal numerical value.

1. Give an account of the different theories of fermentation, and describe two industrial processes which are based on fermentation.

2. How is aceto-acetic ester prepared, and what is its constitution ? Describe its various uses in organic synthesis.

3. How are the following substances prepared:—(a) nitromethane, (b) mercury fulminate, (c) ethylmercaptan, (d) allyl‚alcohol, (e) malachite green, (f) methyl orange, (g) amino-acetic acid, and (h) phenyl-hydrazin ?

4. Write down the constitutional formulae of the different amyl alcohols, and indicate which of these you would expect to be optically active.

Describe the methods which are usually applied for resolving an externally compensated compound into its optically active constituents.

5.   An organic base (*monacid*) gave on analysis the following result:—

$$0.1436 \text{ grm. gave } 0.3633 \text{ grm. } CO_2$$
$$\text{and } 0.1931 \text{ grm. } H_2O ;$$
$$0.1254 \text{ grm. gave } 18.1 \text{ c.c. } N$$
$$\text{at } 27° \text{ C. and } 750 \text{ mm.}$$

Determine the molecular formula of the substance if its platini-chloride contains 33.4 per cent. of platinum. (Pt=195.)

6.   Write a short note on the diazo-reaction. Starting with aniline, show how you would prepare—(a) phenyl-iodide, (b) phenyl-cyanide, (c) phenol, (d) diazo-amido-benzene, and (e) amino-azo-benzene.

7.   Give an account of the contributions to organic chemistry by Berzelius, Liebig and Wöhler.

CHEMISTRY.

Second Honours Paper.

Examiner—Dr. P. C. Mitter, M.A., Ph.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer Question 8; three questions from Group A and two from Group B.

The figures in the margin indicate full marks.

Group A.

1.   What are the sources from which iodine is now manufactured ?   16
Describe one of the methods of its extraction generally adopted at the present time. How would you prepare a strong aqueous solution of hydriodic acid ? Sketch the plant you would employ. What are the uses of this substance ?

2.   How would you account for the presence of free sulphur in   16
nature ? How is sulphur extracted from its ores ? How is sulphur dioxide manufactured at the present time for uses other than that of sulphuric acid manufacture ? Sketch the plant you would employ. What are the principal uses of this substance ?

3.   Give a historical outline of the experiments that led to the   16
discovery of the rarer gases of the atmosphere. How are they now obtained in a pure condition, and how can they be distinguished from one another ? Give reasons for classifying them together as belonging to the zero group in the periodic table of elements.

4.   Name the principal sources from which phosphorus is obtained.   16
Describe the most recent method of its manufacture. Discuss the constitution of the oxyacids of phosphorus.

Group B.

5.   Describe some of the experiments that led to the discovery of   16
the alkali metals, including the rare ones. Compare the alkali metals, and explain how they are distinguished from one another. How is sodium manufactured ? Sketch the plant used.

6. Name the principal ores of lead. Describe a method of its 16 extraction from these. Explain the principle on which desilverization of lead is based, and how it is actually effected. How are oxides of this metal made, and what are their uses in the arts and manufacture ?

7. Name the cobaltimines and write their constitutional formulae. 16 Discuss the constitution of these compounds, and indicate the theories put forth by various workers of late to account for it.

GROUP C.

8. How are the following substances manufactured, and what are 20 the uses they are put to in arts and manufacture :—(a) ultramarine, (b) Prussian blue, (c) vermilion, (d) alum ?

CHEMISTRY.

THIRD HONOURS PAPER.

Examiner—DR. BRAJENDRANATH GHOSH, D.SC.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only FIVE questions are to be attempted.

The same value is attached to each question.

1. State the laws of atomic heat and molecular heat. Explain how they help in the determination of atomic weights. Discuss the anomalous behaviour of silicon and carbon with regard to atomic heat.

2. What are compound radicles ? Give examples. Discuss the bearing of the doctrine of ionization and of valency on the theory of compound radicles.

3. Describe the effects of the gradual rise of temperature on the physical and chemical properties of nitrogen peroxide. Explain how the degree of its dissociation can be determined at any given temperature.

4. You are required to determine the molecular weight of ether vapour. Describe the procedure you would employ, explaining the theory of the method.

5. State the laws of freezing-points of solutions. Discuss their theoretical significance, pointing out their relations to the laws of osmotic pressure.

6. State the laws of electrolysis. Describe three typical cases of the employment of electroytic methods for the extraction of metals.

7. What are irreversible actions in chemistry ? Give typical examples. Explain, with the help of examples, the conditions of chemical equilibrium between two reacting substances in solution.

8. Write short notes on the following :—

    (a) Endothermic and exothermic actions ;
    (b) Homology ;
    (c) Physical isomerism ;
    (d) Fermentation.

CHEMISTRY.

FOURTH HONOURS PAPER.

Examiner—DR. PANCHANAN NIYOGI, M.A., PH.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

Not more than FIVE *questions to be attempted.*

The questions are of equal numerical value.

1. Explain clearly, with equations, the methods for (*a*) the removal of phosphoric acid in the ordinary course of analysis, (*b*) the separation of Al and Fe, (*c*) the separation of Co and Ni, (*d*) the separation of Ca and Mg, and (*e*) the separation of Zn and Cu.

2. Mention the chief oxidizing agents and reducing agents with which you are familiar, and for each write out *one* equation to indicate a purpose for which it may be used, selecting examples from organic as well as inorganic compounds.

3. Describe the preparation and discuss the constitution of (*a*) bleaching powder, and (*b*) tartaric acids.

4. What is meant by the following terms :—(*a*) heat of formation, (*b*) heat of combustion, (*c*) heat of solution, and (*d*) heat of neutralization ?

From the following data calculate the heat of formation of acetylene :—

Heat of combustion of acetylene $= 315,700$ calories,

$C + O_2 = CO_2 + 94,400$ calories,

$H_2 + O = H_2O + 68,400$ calories.

5. Describe the manufacture of *any three* of the following : soda, ash, chlorine, sugar, and soap.

6. Write what you know about the utilization of the following for industrial purposes :—coal-tar, seaweed, and nitrogen of the atmosphere

7. What are the probable impurities which may occur in natural water, and how would you detect them ? Explain clearly what is meant by ' hard ' water, and also the methods used in softening it. Describe *one* method of estimating the hardness of water.

CHEMISTRY.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only five *questions to be attempted.*

The figures in the margin indicate full marks.

1. An organic compound was found on examination to contain,   20
besides oxygen, the following constituents :—

Carbon	..	..	.. 33·78 por cent.
Hydrogen	..	..	.. 4·72 ,,
Nitrogen	..	..	,. 13·17 ,,
Chlorine	..	..	.. 33·34 ,,

What is the simplest possible molecular formula of the above ?
How would you determine carbon and hydrogen in the above
substance ?

2. Describe the uses of the following apparatus and give diagram-   20
matic sketches of the same :—fractionating column, separating
funnel, reflux condensor, potash bulbs, and Schiff's azotometer.

3. Explain the following terms, giving examples wherever pos-   20
sible :—aromatic compounds, aldol condensation, compound radicals,
oxygen carrier, and structural formula.

4. Describe the preparation and properties of the hydrocarbon or   20
hydrocarbons containing one atom of carbon in the molecule. Com-
pare the properties of the above with other hydrocarbons you are
acquainted with.

Write a short note on Kekulé's benzene theory.

5. How would you most conveniently prepare ethyl chloride ?   20
Would you prefer to use the same process in the case of the prepara-
tion of ethyl bromide ? If not, what process would you adopt ?

Give a short account of the various synthetic processes in which
halogen derivatives of hydrocarbons are used.

6. How would you test for the following :—acetone, aniline,   20
cyanides, phenol, and urea ?

7. Describe the preparation of the following substances :—   20

    (a) ethylene glycol,
    (b) acetamide,
    (c) ethyl ether,
    (d) acetic anhydride.

How would you get formic acid from oxalic acid, and vice versa ?

CHEMISTRY.

SECOND PASS PAPER.

Examiners— { RAI BAHADUR DR. CHUNILAL BASU, M.B.
{ BABU CHUNILAL DE, M.A.

Candidates are required to give their answers in their own words as far as practicable.

Only FIVE *questions to be attempted.*

The questions are of equal numerical value.

1. Explain the essential conditions for the liquefaction of a gas. Describe Faraday's experiment in this connexion, and note how it was improved by Pictet.
Chlorine is said to be a 'more easily liquefied' gas than oxygen. Discuss the correctness of the statement.

2. Define 'atomic weight,' and give a brief outline of the various methods used for its determination.

3. How would you prepare the gaseous hydrogen compounds of phosphorus and arsenic ? Note and explain the precautions you will take in each case.

4. State the composition, preparation, properties and uses of the following substances :—(a) Minium, (b) microcosmic salt, (c) lunar caustic, (d) water-gas, (e) sodium amalgam.

5. State the distribution of silicon in nature. How would you obtain it in (a) amorphous and (b) crystalline conditions ? Compare the properties of the two forms of silicon.
Explain the terms ' colloids' and ' crystalloids.' How would you separate the one from the other in a mixture ?

6. You are given a white powder suspected to be a mixture of lead carbonate and calcium phosphate. Give details of the method you would employ to identify the basic radicals in the mixture.

7. Mention the principal ore of antimony, and state how the metal may be obtained from it. How does antimony differ from most other metals in general characters ?
How would you prepare the oxides and the chlorides of the metal, and how are they to be distinguished from the corresponding compounds of bismuth ?

PRACTICAL CHEMISTRY.

Pass and Honours.

In Calcutta, no candidate shall be examined in the College in which he has worked. Each centre is complete in itself, and the candidates at each centre shall be examined only by examiners appointed for that centre.

Examiners—

HONOURS.

CIVIL ENGINEERING COLLEGE, SIBPUR.
SIR P. C. RAY, C.I.E., D.SC., PH.D.—*Convener.*
R. N. SEN, ESQ., M.A.
DR. RASIKLAL DATTA, D.SC.
BABU JATINDRANATH SEN, M.A.

PASS.
SIR P. C. RAY, C.I.E., D.SC., PH.D.—*Convener.*

PRESIDENCY COLLEGE CENTRE.
DR. BIMANBIHARI DE, D.SC.
GOPIMOHAN SEN, ESQ., B.A.

SCOTTISH CHURCHES COLLEGE CENTRE.
B. C. DUTT, ESQ.
BABU BIDHUBHUSHAN DUTT.

ST. XAVIER'S COLLEGE CENTRE.
REV. FATHER VAN NESTE, S.J.
DR. ANUKULCHANDRA SARKAR, M.A., PH.D.

DACCA COLLEGE CENTRE.
RAI B. N. DAS, BAHADUR, M.A., B.SC.
BABU KIRANCHANDRA MITRA, M.A.

GAUHATI COLLEGE CENTRE.
DR. BRAJENDRANATH GHOSH, M.SC. (*Cal.*), D.SC. (*Lond.*).
DR. P. C. MITTER, M.A , PH.D.

RAJSHAHI COLLEGE CENTRE.
BABU PANCHANAN NIYOGI, M.A.
BABU HARIDAS SAHA, M.A.

BERHAMPORE COLLEGE CENTRE.
MR. K. G. NAIK, M.A., B.SC.
DR. SUDHAMAY GHOSH, D.SC. (*Edin.*).

RANGOON COLLEGE CENTRE.
A. E. BELLARS, ESQ., M.A.
DR. HEMENDRANATH SENGUPTA, D.SC.

PRACTICAL CHEMISTRY.

PASS PAPER.

FIRST DAY.

Note the number of each bottle in your answer-book.

The figures in the margin indicate full marks.

1. Make a complete qualitative analysis of the substance (A) 35
which may not contain more than two radicles, acidic or basic.

2. Identify the Organic substance in solution (B). 25

3. Estimate volumetrically the *total* amount of chlorine in the 40
given solution of Barium Chloride (C). You are given a standard
acid and a solution of sodium carbonate.

PRACTICAL CHEMISTRY.

SECOND DAY.

Note the number of each bottle in your answer-book.

The figures in the margin indicate full marks.

1. Make a complete qualitative analysis of the substance (A) 35
which may not contain more than two radicles, acidic or basic.

2. Identify the Organic substance in solution (B). 25

3. Estimate volumetrically the *total* amount of Barium in the
given solution of Barium Chloride (C). You are given a standard
acid and a solution of sodium carbonate.

BOTANY.

Paper-setters— S. C. MAHALANOBIS, ESQ., B.SC., F.R.S.E.
(Pass and C. C. CALDER, ESQ., B.SC.
Honours) DR. P. J. BRUHL, D.SC., I.S.O., F.C.S., F.G.S.

FIRST HONOUR PAPER.

*Examiner—*C. C. CALDER, ESQ., B.SC.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer any FIVE *questions.*

.The questions carry equal marks.

1. Discuss the value of hypogyny, perigyny, and epigyny in the
classification of plants.

2. Give an account of cymose inflorescences, their types and relation-
ships.

3. Point out clearly the resemblances and differences between *Selaginella* and an Angiosperm as regards—(a) the gametophyte generation, (b) the process of fertilization, (c) the nursing of the embryo. Explain these resemblances and differences.

4. Classify the palms, and refer briefly to their uses to man.

5. Give an account of EITHER *Rubiaceae* OR *Malvaceae*, with special reference to their respective affinities.

6. Discuss the vegetation of the Calcutta district *or* of any district with which you are familiar.

7. Discuss the influence of man and modern communications on the distribution of plants, and mention as many plants as you can which are now found wild in India, but are not natives of India.

BOTANY.

SECOND HONOUR PAPER.

Examiner—G. C. BOSE, ESQ., M.A., M.R.A.S.

Candidates are required to give their answers in their own words as far as practicable.

The questions carry equal marks.

1. Give a concise account of the dermal system of Phanerogams.

2. Every plant in its ontogeny passes through a course of development from the simple to the complex. Exemplify this statement.

3. As we ascend the scale from the Mosses to the Phanerogams, the sexual becomes more and more dependent on the asexual generation. Prove the correctness of this statement.

Either,

4. Describe the elements of secondary growth in woody dicotyledons, and give instances of secondary growth in monocotyledons.

Or,

Write an account of the course of vascular bundles which pass from the leaves of dicotyledonous plants into the stem, and compare the structure of the bundles at different points of the course.

Either,

5. Shortly characterize the main groups of Algae.

Or,

Compare and contrast Smut-Fungi and Rust-Fungi, and give an account of the life-history of any member of either order which you have studied in detail

Or,

Describe the morphological characters of any group of cryptogams of which you have made a special study, and trace the life-history of any member of the group.

BOTANY.

THIRD HONOUR PAPER.

Examiner—S. C. MAHALANOBIS, ESQ., B.SC., F.R.S.E.

Candidates are required to give their answers in their own words as far as practicable.

Only FIVE *questions to be answered.*

The questions are of equal numerical value.

1. Discuss the relation between food-storage and reproduction.
2. What effect is produced on *sunlight* by its passage through chlorophyll? What part of the solar spectrum has the greatest influence on the growth of plants? Describe some experiment in evidence of your answer.
3. Describe fully the influence of vegetation on climate.
4. Describe in detail the processes of healing of wounds that obtain in plants.
5. Explain the biological significance of the reduction of chromosomes, and describe the details of the process.
6. Does the atmospheric carbon dioxide play any part in connexion with photosynthesis? Give evidence in support of your answer.
7. What is humus? Give an account of different kinds of soils, with special reference to *loams* and *marls*. What are the important characteristics of a good soil, from the point of view of the plant?

BOTANY.

FOURTH HONOUR PAPER.

Examiner—BABU SURENDRACHANDRA BANERJEE, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal numerical value.

1. Contrast the Mangrove type of vegetation with that of inner Bengal.
2. Write what you know concerning the distribution, in time and space, of the Cycads.

Either,

3. Give an account of De Vries's doctrine of Mutation.

Or,

What evidences in favour of the doctrine of evolution can be adduced from a study of the fossil floras of the Lower and Upper Gondwanas?

Either,

4. ' Periodic phenomena in plants follow marked periodicity in climate.' Examine this statement in detail.

Or,

Characterize, from an oecological point of view, the vegetation of Rain-Forests.

5. Write an account of the influence of Linnaeus's work on systematic botany.

BOTANY.

First Pass Paper.

*Examiner—*Dr. Girindranath Mukherjee, B.A., M.D.

Candidates are required to give their answers in their own words as far as practicable.

Answer any FIVE *questions.*

The questions carry equal marks.

1. Describe the constituent parts of the bast, and indicate the purpose which they serve.

2. What is a seed? Indicate in what respects a seed (*a*) resembles, and (*b*) differs from, a spore. Illustrate your answer with special reference to the macrosporangium of *Selaginella.*

3. Describe the development of *either* the anther *or* the ovule of any phanerogamous species.

4. Compare the sexual organs of a moss with those of a fern.

5. State what you know about Lichens.

6. Give an account of the life-history of wheat rust.

7. How do you distinguish a Labiate from a Verbenacea, a Malvacea from a Sterculiacea, a Sapindacea from an Anacardiacea, a Scrofulariacea from a Bignoniacea, and an Amaryllidacea from a Liliacea ?

BOTANY.

Second Pass Paper.

*Examiner—*J. C. Nag, Esq., B.Sc.

Candidates are required to give their answers in their own words as far as practicable.

Only FIVE *questions to be answered.*

The questions are of equal numerical value.

1. Give an account of the anatomy of the ovule, and describe the histological changes that take place after the fertilization of the ovum.

2. Describe the processes by which plants affect the condition of the atmosphere in which they live.

3. Describe the structure of the laticiferous tissue, and give an account of its principal contents.

4. How would you experimentally prove whether a growth-curvature is produced in response to light or to gravity?

5. Give an account of the various forms of the folding of (a) foliage, and (b) floral leaves in the bud.

6. Describe the influence of parasitism on the host and the parasite respectively.

7. Describe the Indigo plant, and the mode of its cultivation. What natural order does it belong to? From what part of the plant, and how, is the dye obtained?

PHYSIOLOGY.

Paper-setters— (HON. SIR NILRATAN SARKAR, KT., M.A., M.D.
(Pass and { RAI BAHADUR DR. UPENDRANATH BRAHMA-
Honours) (CHARI, M.A., M.D., PH.D.
MAJOR D. McCAY, M.B., I.M.S.

FIRST HONOUR PAPER.

Examiner—MAJOR D. McCAY, M.B., I.M.S.

Candidates are required to give their answers in their own words as far as practicable.

Not more than THREE *questions to be attempted.*

The questions are of equal numerical value.

1. Discuss critically the view that we possess three sets of terminal organs and three sets of fibres; one for pressure, one for heat, and a third for cold.

2. Discuss the condition of the apparent absence of fatigue in nerve.

3. Show by diagrams the paths of connexion between the left eye and parts of the brain associated with vision.

4. How is the pressure in the left ventricle related to the pressure in the aorta at different periods of the cardiac cycle? How has the relationship been determined?

PHYSIOLOGY.

SECOND HONOUR PAPER.

Examiner—S. C. MAHALANOBIS, ESQ., B.SC, F.R.S.E.

Candidates are required to give their answers in their own words as far as practicable.

Not more than THREE *questions to be attempted.*

The questions are of equal numerical value.

1. Discuss the various theories that have been advanced to explain the facts of visional contrast and after-images.

2. Discuss the mechanism of haemolysis of red blood corpuscles by means of distilled water, as contrasted with that caused by specific haemolysins.

3. Discuss the origin and significance of the purin bodies.

4. Write a short essay on the properties of Colloids.

PHYSIOLOGY.

THIRD HONOUR PAPER.

Examiner—THE HON. SIR NILRATAN SARKAR, KT.; M.A., M.D.

Candidates are required to give their answers in their own words as far as practicable.

Not more than THREE *questions to be attempted.*

The questions are of equal numerical value.

1. Describe the structure of the retina. How does the macula lutea and the blend spot differ from the rest of the retina ?

2. Write a note on what you know regarding tryptophane. How has it been isolated from proteins ?

3. Write a short essay on the mechanism of chemical changes in living matter.

4. Discuss the influence on the circulation of variations in the total quantity of the blood.

PHYSIOLOGY.

FOURTH HONOUR PAPER.

Examiner—RAI BAHADUR DR. UPENDRANATH BRAHMACHARI, M.A., M.D., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

Not more than THREE *questions to be attempted.*

The questions are of equal numerical value.

1. Write a careful note on the functions of the Pituitary Body. What is Fröhlich's syndrome ?

2. Give a short account of the parts played by vitamines and calcium salts in the physiology of metabolism and nutrition.

3. Write a note on the functions of the sympathetic and peripheral ganglia.
Does inhibition occur in peripheral ganglia ?

4 What is the part played by afferent impressions in the co-ordination of muscular movements ?

PHYSIOLOGY.

FIRST PASS PAPER.

Examiner—MAJOR D. McCAY, M.B., I.M.S.

*Candidates are required to give their answers in their own words
as far as practicable.*

Not more than FOUR questions to be attempted.

The questions are of equal numerical value.

1. Discuss the food value of each of the following articles :—(a) milk,
(b) fish, (c) meat, (d) rice, (e) wheaten bread, (f) ghee, (g) mustard oil,
(h) eggs.

2. Give a short account of the chemical and electrical changes that
occur in muscle during contraction.

3. How does the circulation in the veins differ from that in the
arteries ? How is the venous circulation maintained ?

4. Discuss the source, the physical and chemical properties, and the
functions of bile.

5. Describe the mechanism by which the respiratory movements are
produced and controlled.

PHYSIOLOGY.

SECOND PASS PAPER.

Examiner—S. C. MAHALANOBIS, ESQ., B.SC., F.R.S.E.

*Candidates are required to give their answers in their own words
as far as practicable.*

Not more than FOUR questions to be attempted.

The questions are of equal numerical value.

1. Discuss the present state of our knowledge regarding the functions
of (a) the tubules of the kidney, (b) Bowman's capsule.

2. Discuss the effects of muscular exercise on (a) the heart and cir-
culation, (b) the exchange of material.

3. What are the possible sources within the body of (a) urea and (b)
uric acid ? Give a detailed account of their formation.

4. Illustrate graphically the position of the descending tracts of the
spinal cord, and discuss the origin and destination of each tract.

5. What is the mean arterial pressure ? What is its relationship to
the systolic and diastolic pressure ?

GEOLOGY.

Paper-setters— { E. Vredenburg, Esq., M.A., F.G.S.
(Pass and Honours) { Dr. L. L. Fermor, D.Sc., F.G.S.

First Honour Paper.

Examiner—J. G. de P. Cotter, Esq.

Candidates are required to give their answers in their own words as far as practicable.

Only five *questions to be attempted.*

The questions carry equal marks.

1. What criteria would you apply in deciphering the order of crystallization of the minerals—
  (a) in an igneous rock ;
  (b) in a mineral vein ?
2. Explain the differences in physical conditions that may cause a magma to solidify at one point in a colloidal or amorphous phase, and at another point in a crystalline phase. What factors facilitate passage from the amorphous to the crystalline phase ?
3. Draw up a scheme of classification of the hypabyssal rocks, and mention any examples of these rocks that occur in India.
4. Discuss the origin of the kodurite series.
5. Give a brief account of what is known as the metamorphis cycle, mentioning the energy changes that characterize each stage.
6. Define the following terms:—borolanite, eclogite, epicentral tract, intersertal, isostasy, mylonitic, perlitic, shonkinite, tephrite, texture.
7. Give a short account of the composition and origin of meteorites.
8. Give a short account of the petrographic composition and structural relationships of any group or area of igneous or metamorphic rocks with which you are personally familiar.

GEOLOGY.

Second Honour Paper.

Examiner—Babu Hemchandra Das Gupta, M.A., F.G.S.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal numerical value.

Group A.

Answer three *questions.*

1. Explain the formation of inliers and outliers ; discuss the possibility of the occurrence of a mass of older rocks, with the structure of an outlier, occurring amongst newer rocks, mentioning any instances with which you may be acquainted.

2. Describe the formation of various kinds of breccia, and their stratigraphical appearances.

3. Describe instances in which there may be some uncertainty as to whether a volcanic rock may be intrusive sill or a contemporaneous flow, and discuss the means of arriving at the most probable interpretation.

4. Describe the stratigraphical features of a compound volcanic cone.

5. Enumerate the fresh-water formations of India, with a general account of their most important features.

6. Outline the classification of the rocks of Tertiary age in India.

GROUP B.

Answer THREE *questions.*

7. Describe briefly the principal groups of plant-fossils characteristic of the Palaeozoic era.

8. Give briefly the classification of the Crinoidea

9. What groups of Mammalian fossils especially characterize the various subdivisions of the Tertiary ?

10. Give, in its main outlines, the geological history of the Cephalopoda.

GEOLOGY.

THIRD HONOUR PAPER.

Examiner—E. VREDENBURG, ESQ., B.SC., F.G.S.

Answer FIVE *questions only.*

The questions are of equal numerical value.

1. Classify and characterize the various changes which may take place in rocks after their consolidation or deposition.

2. How would you proceed to identify the essential and accessory minerals in rocks belonging to the Syenite Family ?

3. Describe the macroscopic and microscopic characters of the igneous rocks occurring in the Raniganj and Jharia coalfields

4. Give an account of the distribution in India of deposits which are chiefly made up (*a*) of kaoline, (*b*) of bauxite.

5. Classify earthquakes and define the technical terms used in detailed descriptions of earthquakes. Add notes on the rate of propagation, duration, frequency and distribution of earthquakes.

6. What theories have been propounded as to the origin of ore deposits ? What ores of economical importance occur in the Indian Peninsula ?

GEOLOGY.

Fourth Honour Paper.

Examiner—P. N. Basu, Esq., B.Sc.

Answer not more than FIVE *questions.*

The questions are of equal numerical value.

1. Give an account of the structure and distribution in space and time of the Graptolites.
2. Characterize in general the order Ammonoidea. What are the chief distinctions between Ammonites and Nautiloids ?
3. Give some details regarding the structure, affinities, and distribution in space and time of the Trilobites.
4. Write an account of the systematic position of the plant fossils found in the Lower Gondwanas.
5. How would you proceed to correlate an Indian rock series with a definite European formation ?
6. Give a general account of the palaeontological character of the Cretaceous system.
7. Write a note on the dentition of the *Elephantidae.*
8. What are the principal palaeontological features that distinguish the Oligocene from the Eocene ?

GEOLOGY.

First Pass Paper.

Candidates are required to give their answers in their own words as far as practicable.

Answer Question 1 *and* FIVE *others.*

The figures in the margin indicate full marks.

1. A mineral has the following composition :—   20
$$Al_2O_3 = 39.5, \ SiO_2 = 46.5, \ H_2O = 14.0.$$
Calculate the formula, and give a brief account of the occurrence of this mineral in nature.
2. Give an account of the Nicol prism, explaining its action and   16 uses. What is the difference between a Nicol prism and a dichroiscope ?
3. State in tabular form the chemical formula, crystal system,   16 colour, and approximate hardness of the following minerals :—
Copper-glance, bismuthinite, bournonite, diaspore, gibbsite natron, sphene, and serpentine.
4. What do you understand by isomorphism ? Illustrate your   16 answer by reference to any suitable group of minerals. Mention a case of dimorphism amongst minerals,

5. Give a brief account of the peridotites, and name the minerals 16 of economic value that are sometimes found in association with these rocks.

6. Is bauxite a mineral or a rock ? What do you know of the 16 mode of occurrence and value of the Indian bauxites ?

7. Write a short account of the causes of vulcanicity. 16

Either,

8. (*a*) Describe any mineral deposit of possible economic value 16 that you have personally examined or visited.

Or,

(*b*) Give a brief account of the history of a piece of granite in so far as this may be deduced from the study of a thin slice under the microscope.

GEOLOGY.

SECOND PASS PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal numerical value.

GROUP A.

Answer THREE *questions.*

1. State what is known or inferred regarding the temperature of the earth below the surface,

2. Describe some of the geological formations due to glacial action.

3. Explain the formation of caverns in limestone regions.

4. Describe the various appearances assumed on a map by strata cut through, on a hill-slope, by a ravine or torrent gully, according to the various angles and directions of dip of the strata.

5. What are the characteristic features that distinguish the pre-Cambrian formations ?

GROUP B.

Answer TWO *questions.*

6. Enumerate the principal subdivisions of the mesozoic or secondary era, mentioning their most characteristic fossils.

7. Give an outline of the classification of the Echinodermata, with some of the most important facts concerning their distribution through geological times.

8. Amongst the Arthropoda, what groups are particularly useful for recognizing the age of the rocks in which their fossil remains may occur ?

9. Describe briefly the main features, structural, stratigraphical, and palaeontological or palaeobotanical, of an Indian Gondwana coal-field.

ZOOLOGY.

Paper-setters—
{
F. H. GRAVELY, ESQ., M.SC.
MAJOR R. E. LLOYD, M.D., D.SC., I.M.S.
DR. B. L. CHOWDHURY, D.SC.
}

FIRST PASS PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer FIVE *questions.*

1. Give an outline of the classification of Protozoa and describe the different modes of reproduction in Suctoria. 20
2. Describe and classify the different histological elements in Porifera, stating the functions of each. 20
3. Describe the different forms of ciliated larvae in the different groups of echinoderms, and indicate how all of these forms may be derived from a single primitive form. 20
4. Describe the developmental cycle of Distomum and contrast this with that of Taenia solium. 20
5. Give an account of the anatomy of Peripatus, pointing out its bearing on the relationship between annelids and arthropods. 20
6. Describe and explain the classification of the Lamellibranchs. 20

ZOOLOGY.

SECOND PASS PAPER.

Candidates are required to give their answers in their own words as far as practicable.

Note more than FIVE *questions are to be attempted, and full marks may be obtained by answering* THREE *questions very fully.*

1. Describe the development of the chick up to the time of the completion of the amnion.
2. Describe and compare the skulls of the Python and the Crocodile.
3. What is meant by the fore-brain? Describe the fore-brain in an elasmobranch fish, a teleostean fish, and a mammal.
4. Give a brief account of the anatomy and development of Balanoglossus, laying stress on those features which belong to the vertebrate type.
5. Write all you know of the structure, classification, and distribution of the Edentata.
6. What do the following words call to mind:—Sphenodon, stapes, baleen, Echidna, Hipparion, endostyle, Dromaeus?

ZOOLOGY—PRACTICAL.

The figures in the margin indicate full marks.

1. Dissect the specimen A provided, so as to expose the portal 34 systems, indicating the principal parts of these systems with flag-labels.

2. Stain, mount, identify and make a descriptive drawing of 33 the specimen B provided.

3. Identify the specimens C to M, giving reasons for your identi- 33 fications.

𝔐.𝔄. 𝔈xamination.

1918.

ENGLISH.

FIRST PAPER.

The questions carry equal marks.

Answer THREE *questions from each half.*

FIRST HALF.

Examiner—S. N. BHADRA, ESQ., M.A.

1.   ' The most flourishing period of Anglo-Saxon poetry was between 650 and 825 A.D.'
Give some account of the principal works and indicate their general characteristics.

2.   Indicate the importance in the history of English literature of the appearance of

(*a*) Sir John Mandeville's Travels.
(*b*) Chaucer's Canterbury Tales.

3.   Give an account of the Ballad Poetry of England in the latter half of the 15th century and account for its popularity.

4.   Characterise the Prose style of

Jeremy Bentham
or
Hooker
or
Bacon.

5.   Give some account of early English Theatres.

6.   State what you know of *two* of the following :—

(*a*) Boke of the Sparrow.
(*b*) King's Quhair.
(*c*) Toxophilus.
(*d*) The Defence of Poesy.

SECOND HALF.

Examiner—RAI LALITMOHAN CHATTERJEE, BAHADUR, M.A.

1.   Illustrate the chief characteristics of seventeenth century lyrics.

2.   Give a brief account of *two* of the following :—Robert Burton, John Bunyan, Samuel Pepys, Daniel Defoe.

32

3. Write a careful appreciation of *one* of the following:—Jane Austen, Charles Reade, George Eliot, John Ruskin.

4. Give a careful account of the Nature poetry of the eighteenth century.

5. Write a brief essay on M. Arnold and Clough
                    or
        Shelley and Keats.

6. Give an account of the eighteenth century essay.

ENGLISH.

Second Paper.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

First Half.

Examiner—Dr. H. C. Mukherjee, M.A., Ph.D.

Answer Question 5 and any two *questions out of the first four.*

1. Write a short note on Shakespeare's use of the supernatural 12½ in his tragedies.

2. Discuss the statement, " Ben Jonson took up the comic pre- 12½ sentation of ' humours ' from the work of his predecessors for further development in a realistic manner excluding what he considered to be over-romantic."

3. Indicate by quotations or references the nature and extent of 12½ the alleged influence on Swinburne of any *two* of the following : (*a*) the Greek dramatists, (*b*) Keats, (*c*) Shelley, (*d*) Rossetti.

Or,

" Goldsmith's comedies turn on an extravagance of intrigue and 12½ disguise.... but the ease of his humorous dialogue, and the droll, yet true conception of the characters, make sufficient amends for an occasional stretch in point of probability."
Discuss and illustrate.

4. Write a short note on Shakespeare's jealous men.   12½

5. Annotate five of the following passages, taking *one* only from each group :—

Group A.

(i) If you desire to know the certainty   35
    Of your dear father's death, is't writ in your revenge,
    That, swoopstake, you will draw both friend and foe.
    Winner and loser ?

(ii)   What might you think,
        If I had play'd the desk or table-book,
        Or given my heart a winking, mute and dumb,
        Or look'd upon this love with idle sight ;
        What might you think ?

GROUP B.

(iii) And for your green wound—your Balsamum and your St.
John's wort are all mere gulleries and trash to it, especially your
Trinidado : your Nicotian is good too.

(iv) Well, if he read this with patience I'll troll ballads for Master
John Trundle yonder, the rest of my mortality.

GROUP C.

(v) The first, for many I know not, being far off,
    Peleus the Larissæan, couched with whom
    Sleeps the white sea-bred wife and silver-shod,
    Fair as fled foam.

(vi) When flying the dove was snared
     As with men's hands, we shot after and sped
     Clear through the irremeable Symplegades.

GROUP D.

(vii) What is this incendiary stuff and trumpery to me ?   Our
house may travel through the air like the house of Lorettð, for
aught I care, if I am to be miserable in it.

(viii) Was it for this I have been dreaded both my ins and outs ?
Have I been chaired at Wildman's and a speaker at Merchant-
Tailors' Hall ?   Have I had my hand to addresses, and my head in
the print shops,—and talk to me of suspects ?

GROUP E.

(ix)   Fear o'ershades me
        Good expedition be my friend, and comfort
        The gracious queen, part of his theme, but nothing of his ill-
            ta'en suspicion !

(x) 'Tis well they are whispering; clamour
    Your tongues, and not a word more.

SECOND HALF.

Examiner—PRAPHULLACHANDRA GHOSH, ESQ., M.A.

1. Write a note on *one* of the following themes :—   10
    (i) Shakespeare as a critic of the histrionic art.
    (ii) Shakespeare's use of prose.

2.   Answer *one* of the following :—   **40**
       (i) Annotate the passage quoted below and explain the political
creed expressed in it :—

> The heavens themselves, the planets, and this centre
> Observe degree, priority, and place,
> Insisture, course, proportion, season, form
> Office, and custom, in all line of order :
> And therefore is the glorious planet Sol
> In noble eminence enthron'd and spher'd
> Amidst the other ; whose med'cinable eye
> Corrects the ill aspects of planets evil,
> And posts, like the commandment of a king,
> Sans check, to good and bad : but when the planets
> In evil mixture to disorder wander,
> What plagues, and what portents, what mutiny,
> What raging of the sea, shaking of earth,
> Commotion in the winds, frights, changes, horrors,
> Divert and crack, rend and deracinate
> The unity and married calm of states
> Quite from their fixture !   O ! when degree is shak'd,
> Which is the ladder to all high designs,
> The enterprise is sick.   How could communities,
> Degrees in schools, and brotherhoods in cities,
> Peaceful commerce from dividable shores,
> The primogenitive and due of birth,
> Prerogative of age, crowns, sceptres, laurels,
> But by degree stand in authentic place ?
> Take but degree away, untune that string,
> And, hark ! what discord follows ; each thing meets
> In mere oppugnancy : the bounded waters
> Should lift their bosoms higher than the shores,
> And make a slop of all this solid globe ;
> Strength should be lord of imbecility,
> And the rude son should strike his father dead :
> Force should be right ; or rather, right and wrong—
> Between whose endless jars justice resides—
> Should lose their names, and so should justice too.
> Then everything includes itself in power,
> Power into will, will into appetite ;
> And appetite, an universal wolf,
> So doubly seconded with will and power,
> Must make perforce a universal prey,
> And last eat up himself.

       (ii) Paraphrase the following lines and analyse the mental con-
dition of the speaker revealed therein :—

> If it were done when 'tis done, then 'twere well
> It were done quickly ; if the assassination
> Could trammel up the consequence, and catch
> With his surcease success ; that but this blow
> Might be the be-all and the end-all here,
> But here, upon this bank and shoal of time,
> We'd jump the life to come.   But in these cases
> We still have judgment here ; that we but teach
> Bloody instructions, which, being taught, return
> To plague the inventor; this even-handed justice
> Commends the ingredients of our poison'd chalice
> To our own lips.   He's here in double trust :

First, as I am his kinsman and his subject,
Strong both against the deed: then as his host,
Who should against his murderer shut the door
Not bear the knife myself. Besides, this Duncan
Hath borne his faculties so meek, hath been
So clear in his great office, that his virtues
Will plead like angels trumpet-tongued against
The deep damnation of his taking-off;
And pity, like a naked new-born babe,
Striding the blast, or heaven's cherubin, hors'd
Upon the sightless couriers of the air,
Shall blow the horrid deed in every eye,
That tears shall drown the wind. I have no spur
To prick the sides of my intent, but only
Vaulting ambition, which o'erleaps itself
And falls on the other—

(iii) Annotate the following passage, and with a brief note on
Shakespeare's delineation of the Clown in his plays :—

Jaq.   I am ambitious for a motley coat.
Duke S.   Thou shalt have one.
Jaq.   It is my only suit ;
Provided that you weed your better judgments
Of all opinion that grow rank in them
That I am wise. I must have liberty
Withal, as large a charter as the wind,
To blow on whom I please ; for so fools have ;
And they that are most galled with my folly,
They most must laugh. And why, Sir, must they so ?
The ' why ' is plain as way to parish church:
He that a fool doth very wisely hit,
Doth very foolishly, although he smart,
Not to seem senseless of the bob : if not,
The wise man's folly is anatomis'd
Even by the squandering glances of the fool.
Invest me in my motley : give me leave
To speak my mind, and I will through and through
Cleanse the foul body of the infected world,
If they will patiently receive my medicine.

ENGLISH.

THIRD PAPER.

*Candidates are required to give their answers in their own words·
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiners— { M. GHOSH, ESQ., M.A.
{ S. SEN, ESQ., M.A.

1. Explain carefully, while marking the context, one *only* of *each*
of the following groups of alternative passages :—

(*a*) Must a game be played for the sake of pelf ?   5
　　Where a button goes, 'twere an epigram
　　To offer the stamp of the very Guelph
　　The true has no value beyond the sham :
　　As well the counter as coin, I submit
　　When your table's a hat, and your prize a dram
　　Stake your counter as boldly every whit
　　Venture as truly, use the same skill,
　　Do your best, whether winning or losing it,
　　If you choose to play ! is my principle
　　Let a man contend to the uttermost
　　For his life's set prize, be it what it will !
　　　　　　　　　　Or,

　　That's if ye carve my epitaph aright
　　Choice Latin, picked phrase, Tully's every word
　　No gaudy ware like Gandolf's second line—
　　Tully, my masters ?　Ulpian serves his need !
　　And then how shall I live through centuries,
　　And hear the blessèd mutter of the mass
　　And see God made and eaten every day
　　And feel the steady candle-flame, and taste
　　Good strong, thick stupifying incense smoke !

(*b*) To every natural form, rock, fruit or flower   5
　　Even the loose stones that cover the highway,
　　I gave a moral life : I saw them feel,
　　Or linked them to some feeling : the great mass
　　Lay bedded in a quickening soul, and all
　　That I beheld respired with inward meaning.
　　Add that whate'er of Terror or of Love
　　Or Beauty, Nature's daily face put on
　　From transitory passion, unto this
　　I was as sensitive as waters are
　　To the sky's influence in a kindred mood
　　Of passion ; was obedient as a lute
　　That waits upon the touches of the wind.
　　　　　　　　　　Or,

　　Sometimes, more sternly moved I would relate
　　How vanquished Mithridates northward passed

And hidden in the cloud of years become
Odin, the father of a race by whom
Perished the Roman Empire ; how the friends
And followers of Sertorius, out of Spain
Flying found shelter in the Fortunate Isles
And left their usages, their arts and laws
To disappear by a slow gradual death
To dwindle and to perish one by one
Starved in those narrow limits : but not the soul
Of Liberty which fifteen hundred years
Survived.. .

(c) Sometime let gorgeous Tragedy   5
In sceptred pall come sweeping by,
Presenting Thebes or Pelop's line,
Or the tale of Troy divine
Or what though rare of later age
Ennobled hath the buskined stage.
But, O sad Virgin ! that thy power,
Might raise Musaeus from his bower,
Or bid the soul of Orpheus sing
Such notes as warbled to the string
Drew iron tears down Pluto's cheek
And made hell grant what love did seek :
Or call up him who left half-told
The story of Cambuscan bold.
Of Camball and of Algarsife
And who had Canace to wife.

Or,

How well could I have spared for thee, young swain..
Enow of such as, for their bellies' sake
Creep, and intrude and climb into the fold !
Of other care they little reckoning make
Than how to scramble at the shearers' feast,
And shove away the worthy bidden guest.
Blind mouths ! that scarce themselves know how to hold
A sheep-hook, or have learnt aught else the least
That to the faithful herdman's art belongs !
What recks it them ?   What need they ?   they are sped :
And when they list their lean and flashy songs
Grate on their scrannel pipes of wretched straw ;
The hungry sheep look up and are not fed . . . . .

2.   Discuss the various aspects of Browning's philosophy of failure   10
in " The Grammarian's Funeral," " Andrea del Sarto " and " Rabbi
ben Ezra " or from any other poems in your Selections.

Or,

Estimate the descriptive powers of Milton, Wordsworth and Brown-
ing respectively from typical passages like the description of flowers
in " Lycidas," of sunrise in the Fourth Book of the " Prelude," of
the Alpine gorge in " By the Fireside."
How do these poets differ in their attitude towards Nature ?

3.   Define clearly the various stages of Wordsworth's poetical   10
development under the influences of Nature as recorded in the
Prelude.   Can you trace any similar evolution of the real Milton by
an examination of his youthful poems from " L'Allegro'
" Lycidas," and on to the latest of his sonnets ?

Or,

Show the Miltonic influence on Wordsworth in the blank verse of the Prelude, and contrast it with the ' nobly plain' manner of Wordsworth in its more inspired passages. What, in your opinion, are the true and characteristic excellences of the blank verse of Milton, Wordsworth and Browning respectively ?

4. Explain carefully *either* of the following passages :—   15

> But he, though blind of sight,
> Despised, and thought extinguished quite,
> With inward eyes illuminated,
> His fiery virtue roused
> From under ashes into sudden flame,
> And as an evening dragon came,
> Assailants on the perched roosts
> And nests in order ranged
> Of tame villatic fowl, but as an eagle
> His cloudless thunder bolted on their heads
> So, virtue given for lost,
> Depressed and overthrown as seemed ;
> Like that self-begotten bird
> In the Arabian woods embost
> That no second knows nor third,
> And long erewhile a holocaust,
> From out her ashy womb now teemed,
> Revives, reflourishes, then vigorous most
> When most unactive deemed ;
> And though her body die, her fame survives,
> A secular bird, ages of lives.

Or,

> There are flashes struck from midnights
> There are fire-flames noondays kindle
> Whereby piled-up honours perish
> Whereby swoln ambitions dwindle
> While just this or that poor impulse
> Which for once had play unstifled
> Seems the sole work of a life-time
> That away the rest have trifled.

> Doubt you, if in some such moment
> As she fixed me, she felt clearly
> Ages past the soul existed,
> Here an age 'tis resting merely,
> And hence fleets again for ages ;
> While the true end sole and single
> It stops here for is this love-way
> With some other soul to mingle.

> Else it loses what it lived for,
> And eternally must lose it ;
> Better ends may be in prospect
> Deeper blisses, if you choose it,

But this life's end and this love's bliss
Have been lost here. Doubt you whether
This she felt, as looking at me
Mine and her souls rushed together ?

SECOND HALF.

Examiner—SUSILKUMAR DE, ESQ., M.A.

1. Explain the details of the allegory of the Garden of Adonis, 13
noting carefully any Platonic conception embodied in it, and indicate
generally Spenser's method of delineating allegorical figures. In
what ways is Spenser indebted to allegorical poets preceding him ?

Or.

Describe briefly the different types of Chastity and Unchastity,
figuring in Books III and IV of the *Fairie Queene*, noting specially
Spenser's characterisation of the various types of virtuous woman-
hood and criticising, in this connexion, the view that in his concep-
tion of the character of Britomart, Spenser followed " not so much
his own imagination as that of Ariosto when he pourtrayed the
woman-knight Bradamante."

Or.

Speaking of Coleridge's *Love*, a certain critic observes that the
poem " is flawed by a certain amount of namby-pambiness from
which none of the Lake School escaped when they tried passion."
Discuss, comparing or contrasting, in view of the above criticism,
the love-poems of Coleridge and Wordsworth with those of Shelley,
Keats, and Byron.

Or,

Explain briefly the different points of view from which Words-
worth, Shelley, and Keats respectively regarded the relation of man
to nature, and point out the resulting divergence in their methods
of delineating the various aspects of nature. Illustrate your answer,
referring specially to the pure nature-lyrics—the flower-poems, bird-
lyrics, and poems of animal life—in your Selection.

GROUP A.

2. Explain any *one* of the following passages, indicating clearly 6
the place of each of those you select in the poem from which it is
taken :—

    (a) Drive my dead thoughts over the universe,
        Like wither'd leaves to quicken a new birth ;
        And, by the incantation of this verse,
        Scatter, as from an unextinguish'd hearth
        Ashes and sparks, my words among mankind !

    (b) Me this uncharter'd freedom tires:
        I feel the weight of chance-desires ;
        My hopes no more must change their name ;
        I long for a repose that ever is the same.

    (c) Heard melodies are sweet, but those unheard
        Are sweeter : therefore, ye soft pipes, play on
        Not to the sensual ear, but more endear'd,
        Pipe to the spirit ditties of no tone.

(*d*) O joy ! that in our embers
　　　Is something that doth live,
　　　That Nature yet remembers
　　　What was so fugitive !

GROUP B.

Explain any *one* of the following passages, with notes on the references and symbolisms, or wherever else needed :—

(*a*) Then shall a royall virgin raine, which shall
　　　Stretch her white rod over the Belgicke shore,
　　　And the great Castle smite so sore withall
　　　That it shall make him shake, and shortly learne to fall.

(*b*) And shall see Stamford, though now homely hid,
　　　Then shine in learning, more then even did
　　　Cambridge or Oxford, England, goodly beames.

(*c*) Much more of price and of gratious powre
　　　Is this then that same water of Ardenne,
　　　The which Rinaldo dranck in happie howre
　　　Described by that famous Tuscane penne.

(*d*) That daintie Rose, the daughter of her Morne,
　　　More dear then life she tendered, whose flowre
　　　The girlond of her honour did adorne.

UNSEEN PASSAGES.

3.　Bring out the sense of any *one* of the following passages, clear-　25
ing up all difficulties of thought or expression :—

(*a*) Methought I saw the grave where Laura lay,
　　　Within that temple where the vestal flame
　　　Was wont to burn ; and passing back that way,
　　　To see the buried dust of living fame,
　　　Whose tomb fair Love and fairer Virtue kept,
　　　All suddenly I saw the Faery Queen ;
　　　At whose approach the soul of Petrarch wept ;
　　　And henceforth those Graces were not seen,
　　　For they this Queen attended ; in whose stead
　　　Oblivion laid him down on Laura's hearse.
　　　Hereat the hardest stones were seen to bleed,
　　　And groans of buried ghosts the heavens did pierce :
　　　Where Homer's spright did tremble all for grief,
　　　And cursed the access of that celestial thief.

(*b*) Wanting is—what ?
　　　Summer redundant,
　　　Blueness abundant
　　　——where is the blot ?
　　　Beamy the world. yet a blank all the same,
　　　Frame-work which waits for a picture to frame ;
　　　What of the leafage, what of the flower ?
　　　Roses embowering with nought they embower !
　　　Come then, complete incompletion, O comer,
　　　Pant through the blueness, perfect the summer !

Breathe but one breath
Rose-beauty above,
And all that was death
Grows life, grows love.
  Grows love !

(c) I thought once how Theocritus had sung
Of the sweet sad years, the dear and wished· for years,
Who each one in a gracious hand appears
To bear a gift for mortals, old or young:
And as I mused it in his antique tongue,
I saw, in gradual vision through my tears,
The sweet, sad years, the melancholy years,
Those of my own life, who by turns had flung
A shadow accross me. Straightway I was 'ware
So weeping, how a mystic shape did move
Behind me, and drew me backward by the hair,
And a voice said in mastery while I strove—
" Guess now who holds thee ? "—" Death " I said. But,
  there,
The silver answer rang—" Not Death, but Love."

(d) Great wrong I doe, I can it not deny?
To that most sacred Empresse, my dear dred.
Not finishing her Queene of Faëry,
That mote enlarge her living prayses, dead,
But Lodwick, this of grace to me aread :
Do you not thinck th' accomplishment of it
Sufficient werke for one mans simple head,
All were it, as the rest, but rudely writ ?
How then should I, without another wit,
Thinck ever to endure so tedious toyle !
Sith that this one is tossed with troublous fit
Of a proud love, that doth my spirite spoyle.
Ceasse then, till she vouchsafe to grawnt me rest ;
Or lend you me another living brest.

ENGLISH.

Fourth Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

First Half.

Examiner—F. W. Sudmersen, Esq., B.A.

1. " Bacon's strength appears to best advantage in his specula- 10
tions on character and conduct." Discuss this in connection with
Bacon's Essays and give illustrative references.

Or,

Write a critical review of Bacon's Essay on " The true greatness of
kingdoms and estates."

2. Write a critical analysis of Lowell's study of Abraham Lincoln 10 *or* of Carlyle.

3. Explain and comment on any *four* of the following, indicating 10 the context :—

(*a*) The way of fortune is like the milky way in the sky.

(*b*) As for Cleon's dream, I think it was a jest

(*c*) The part of Epimetheus might well become Prometheus in the case of discontentments.

(*d*) There are four principal sources from which Chaucer may be presumed to have drawn for poetical suggestion or literary culture.

(*e*) Truth to nature can be reached ideally, never historically.

(*f*) No sham could encounter those terrible eyes in Dublin without wincing.

4. Give in your own words, and comment on, the meaning and 20 purpose of the following passage :—

In the outset of life our imagination has a body to it. We are in a state between sleeping and waking, and have indistinct but glorious glimpses of strange shapes, and there is always something to come better than what we see. As in our dreams the fulness of the blood gives warmth and reality to the coinage of the brain, so in youth our ideas are clothed and fed and pampered with our good spirits ; we breathe thick with thoughtless happiness, the weight of future years presses on the strong pulses of the heart, and we repose with undisturbed faith in truth and good. As we advance we exhaust our fund of enjoyment and of hope. We are no longer wrapped in lamb's wool, lulled in elysium As we taste the pleasures of life, their spirit evaporates, the sense palls ; and nothing is left but the phantoms, the lifeless shadows of what has been !

The figures in the margin indicate full marks.

SECOND HALF.

Examiner—RAJANIKANTA GUHA, ESQ., M.A.

1. Narrate briefly the circumstances under which the *Areopagitica* 10 was written. What place does it hold in the history of Freedom of Thought ?
                                          Or,

What are the grounds on which Milton opposes the censorship of 10 the press ? Summarise his arguments on " the no good it can do," and " the manifest hurt it causes."

2. Examine the statement made by Carlyle that *Sartor Resartus* 10 is " symbolical myth all." Give an exposition of his clothes-philosophy.
                                          Or,

" To me also, entangled in the enchanted forests, demon-peopled, 10 doleful of sight and of sound, it was given, after weariest wanderings, to work out my way into the higher sunlit slopes—of that Mountain which has no summit, or whose summit is in Heaven only ! "

Trace the spiritual history of Teufelsdröckh as indicated in this passage.

3. Elucidate *two* of the following (one from A, and one from B):—   10

A.

(*a*) Assuredly we bring not innocence into the world, we bring impurity much rather; that which purifies us is trial, and trial is by what is contrary.

(*b*) Truth and understanding are not such wares as to be monopoliz'd and traded in by tickets and statutes and standards.

(*c*) Opinion in good men is but knowledge in the making.

B.

(*a*) I knew not that spiritual music can spring only from discords set in unison; that but for Evil there were no Good, as victory is only possible by battle.

(*b*) Our Works are the mirror wherein the spirit first sees its natural lineaments.

(*c*) Speech is of Time, Silence is of Eternity.

4. Give the sense of *either* of the following in your own words:—   20

(*a*) Poetry is the record of the best and happiest moments of the happiest and best minds. We are aware of evanescent visitations of thought and feeling sometimes associated with place or person, sometimes regarding our own mind alone, and always arising unforeseen and departing unbidden, but elevating and delightful beyond all expression; so that even in the desire and regret they leave, there cannot but be pleasure, participating as it does in the nature of its object. It is as it were the interpenetration of a diviner nature through our own; but its footsteps are like those of a wind over the sea, which the coming calm erases, and whose traces remain only, as on the wrinkled sand which paves it. These and corresponding conditions of being are experienced principally by those of the most delicate sensibility and the most enlarged imagination; and the state of mind produced by them is at war with every base desire. The enthusiasm of virtue, love, patriotism, and friendship, is essentially linked with such emotions; and whilst they last, self appears as what it is, an atom to a universe. Poetry redeems from decay the visitations of the divinity in man.

(*b*) It is easy to talk, as Macaulay does, of the higher and middling orders being the natural representatives of the human race. But are they the natural representatives of the needs of the human race? Have the higher and middling orders no prejudices, interests, indolence of their own, to deaden their perception of Rousseau's resplendent commonplace: "'Tis the people that compose the human race; what is not people is so small a concern that it is not worth the trouble of counting"? Bright put the same civilising truth in homelier words when he reminded us that great halls and baronial castles do not make a nation; the nation in every country dwells in the cottage. This is the cardinal thought that, under whatever name and in whatever apparel, guides and inspires Benthamism, Socialism, Scientific Economy, Rationalism, Liberalism, political Positivism, even Christianity, and all the other multitudinous struggles in the world for moral renovation of human government. The philosophy is easy; not so easy for generations of men and electors to be born over again; not so the readjustment of machinery in a settled community with ancient roots and its mainsprings of action established and accepted.

ENGLISH

GROUP A.

FIFTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—SUNITIKUMAR CHATTERJEE, ESQ., M.A.

1. Render into Modern English *one* of the following passages, and   10
comment on *five* of the words in italics in the passage you select:—

(i) Blisful was the first age of men! They *helden* hem apayed
with the metes that the trewe feldes *broughten* forth. They ne dis-
troyede nor deceivede nat *hemself* with outrage. They weren *wont*
lightly to slaken *hir* hunger at even with acornes of okes. They ne
coude nat medly the yifte of Bachus to the cleer hony; that is to
seyn, they coude make no piment nor clarree; no they coude nat
medle the brighte fleeses of the contree of *Seriens* with the venim of
Tyrie; that is to seyn, they coude nat deyen whyte fleeses of Serien
contree with the blode of a *maner* shelfisshe that men finden in Tyrie,
with whiche blood men deyen purpur. They *slepen* hoolsom slepes
up-on the gras, and drenken of the *renninge* wateres; and layen
under the shadwes of the *heye* pyn-trees.

(ii) The causes that *oghte moeve* a man to Contricion *been* six.
First, a man shal remembre him of *hise* sinnes; / but *loke* he that
thilke remembrance ne be to him no *delyt* by no wey, but greet shame
and *sorwe* for his gilt. For Job seith: 'sinful men doon werkes
worthy of confession.' / And therfore seith Ezechie: 'I wol re-
membre me alle the yeres of my lyf, in bitternesse of myn herte.' /
And god seith in the Apocalips: '*remembreth* yow fro *whennes* that
ye been falle'; for *biforn* the tyme that ye sinned, yo were the chil-
dren of god, and limes of the regne of god; / but for your sinne ye
been *woxen* thral and foul, and membres of the *feend*, hate of aungels,
sclaundre of holy chirche, and fode of the false serpent; perpetuel
matere of the fyr of helle. /

2. Annotate fully *three* of the following passages :—   15

(i) A long castel with walles whyte,
By seynt Iohan! on a riche hill.

(ii) I trow hit was in the dismalle
That was the ten woundes of Egypte.

(iii) He wayted many a constellacioun
Er he had don this operacioun ;
And knew ful many a seel and many a bond.

(iv) And, after that she of hir swough gan breyde, (abreyde)
Right in hir haukes ledene thus she sayde.

3. What are the main characteristics of the syntax of Old English ?
How far has English syntax been influenced by the syntax of
French ?

Or,

Discuss the syntactical peculiarities of *six* of the following expressions: *These kind of knaves, jewel of a man, their tempered youth with aged father's awe, his greedy prey, foure so fast, a fair-spoken man, some will dear abide it, what trade art thou, us sleeping, a iiii sore horses, sterile curse, half the day.*

4. Write a note on *English Adverbs.*   6

Or,

Discuss in brief the history of the following *sounds* of Modern English : š (= <u>sh</u>), tš (= <u>ch</u>), w.

5. Institute a brief comparison, in their sounds and inflections, 10 between Chaucer's English and the English of the present day.

Or,

Write a historical note on *the English Pronoun of the second person,* and on the English numerals *four, five, twelve, hundred.*

Or,

Comment on *ten* of the following words : *yes, whether, thrice, willy-nilly, can, chid, each, she, other, inmost, nearer, better, forlorn, over.*

SECOND HALF.

Examiner—T. S. STERLING, ESQ., M.A.

1. Render into Modern English *two* of the following passages, 10 adding etymological and grammatical notes :—

(1) This sowdanesse, whom I thus blame and warye,
Leet privoly hire conseil goon hire way.
What sholde I in this tale lenger tarye ?
She rydeth to the sowdan on a day,
And seyde him that she wolde reneye her lay.

(2) The hote somer had maad his hewe al broun ;
And, certeinly, he was a good felawe.
Ful many a draughte of wyn had he y-drawe
From Burdeux-ward, whyl that the chapman sleep.

(3) And som man wolde out of his prisoun fayn,
That in his hous is of his meynee slayn.
Infinite harmes been in this mateere,
We witen nat what thing we preyen heere.

(4) Thy temple wil I worshipe evermo,
And on thyn auter where I ride or go,
I wol doon sacrifice and fires beete.

2. Write a note on *one* of the following :—   10

(1) Chaucer's progress in the art of story-telling.
(2) Chaucer's treatment of his sources with regard to the *Knight's Tale.*
(3) Chaucer's merits as a character-painter.

3. Render into Modern English *three* of the following passages, 10 adding full etymological, grammatical, and metrical notes :—

(1) He wook, and tolde his felawe what he mette,
And preyde hym his viage for to lette ;

As for that day, he preyde hym to byde.
His felawe, that lay by his boddes syde.
Gan for to laughe, and scorned him ful faste ;
" No dreem," quod he, " may so myn herte agaste,
That I wol lette for to do my thynges."

(2) " Madame," he seyde, " ye moote foryeve it me,
Though I do thyng to which I am constreyned,
Ye been so wys, that ful wel knowe ye
That lordes heestes mowe nat been y-feyned ;
They mowe wel been biwailled and compleyned,
But men moote nede unto hise lust obeye,
And so wol I : ther is namoore to seye."

(3) " And after him by order shul ye chese,
After your kynde, everich as yow lyketh,
And as your hap is shul ye wynne or lese ;
But which of yow that love most entriketh
God sende him hir that sorest for him syketh."
And therewithal the tercel gan she calle,
And seyde, " My sone, the choys is to thee falle."

(4) For th'ilke grounde that ber'th the wedes wikke
Ber'th eek these holsom herbes as ful ofte :
And next the foule netle, rough and thikke,
The rose waxeth swete, smothe, and softe ;
And next the valey is the hil o-lofte ;
And next the derke nighte, the gladde morwe ;
And also joye is next the fyn of sorwe.

ENGLISH.

GROUP A.

SIXTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Examiner—J. W. HOLME, ESQ., M.A.

Answer THREE *questions only.*

The questions carry equal marks.

1. Indicate Shakespeare's attitude to the contemporary pastoral convention of such writers as Lyly and Sidney.
2. Discuss the possible autobiographical element in *Hamlet* and *The Tempest.*
3. What are the moral and aesthetic effects of Shakespearean tragedy upon the spectator ?

4. Write a short appreciation of the quality and dramatic effectiveness of Shakespeare's songs.

5. Discuss, with reference to *Macbeth*, *The Merchant of Venice*, *Sejanus* and *Vittoria Corombona* the questions of (*a*) local colouring and (*b*) realistic historical background for dramatic action.

SECOND HALF.

Examiner—JAYGOPAL BANERJEE, ESQ., M.A.

Only THREE *questions are to be attempted.*

The questions carry equal marks.

1. Enumerate the distinctive features of the old sacred plays and the new " drama of art."

2. Write a *connected narrative* of the progress of the Elizabethan drama up to Shakespeare's time, with special reference to the contributions made by *either* of the following : —

(1) Marlowe, (2) Peele.

3. Illustrate *one* of the two following statements :—

(*a*) " Webster's genius was of a weird, gloomy, morbid cast like Marlowe's raised to a higher power."

(*b*) " The moral value of ' poetic justice ' in the Elizabethan drama is rendered somewhat doubtful by the fact that it is also to be found in the works of poets of questionable morality such as Beaumont and Fletcher."

4. Write a full note on the dramatic use of prose in Elizabethan plays, indicating the underlying principle of the method of passing from verse to prose and *vice versâ*.

5. What are the advantages derived from the close alliance of the art of the playwright with that of the actor ? Illustrate your answer by concrete instances.

ENGLISH.

GROUP A.

SEVENTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Examiner—J. R. BARROW, ESQ., M.A.

Full marks—50.

Answer any THREE *of the following questions.*

They are of equal value.

1. Explain the difference between the Classical and Romantic types of Poetry, and state the theory of poetry and poetical composition advanced by Wordsworth and Coleridge, explaining Wordsworth's state-

33

ment that poetry " is the impassioned expression which is in the coun-
tenance of all Science."

2. Sketch Wordsworth's criticism of the fashionable poetry of the
18th century, and the reforms which he proposed to introduce, giving
your own opinion: and explain the origin and purpose of the *Lyrical
Ballads*.

3. Explain the distinction made by Wordsworth and Coleridge
between Fancy and Imagination, and refer to any poem or poems in
which you consider that Fancy is predominant and to any in which you
consider that Imagination is predominant, explaining your reasons.

4. Sketch the early life of De Quincey, showing how the *Confessions*
came to be written. What is meant by the ' aureate' style in prose ?
Of what other authors is it specially characteristic, and how far is it
characteristic of De Quincey ? Sketch, in your own words, any one of
De Quincey's dream-visions.

5. Name the authors of any *three* of the following passages, pointing
out the peculiarities of style or thought (or both) by which you recognise
the authors :—

(*a*) What a melodious ascent as of a prelude to some impassioned
requiem, breathing from the pomps of earth and from the sanctities of
the grave ? What a *fluctus decumanus* of rhetoric ! Time expounded
not by generations or centuries, but by the vast periods of conquests
and dynasties; by cycles of Pharaohs and Ptolemies, Antiochi and
Arsacidae ! And these vast successions of time distinguished and figured
by the uproars at their inaugurations; by drums and tramplings rolling
overhead upon the chambers of forgotten dead—the trepidations of time
and mortality vexing at secular intervals the sabbaths of the grave !

(*b*) Thus does man, in every age, vindicate consciously or uncon-
sciously, his celestial birthright. Thus does Nature hold on her
wondrous, unquestionable course; and all our systems and theories are
but so many froth-eddies or sand-banks, which she from time to time casts
up, and washes away. When we can drain the Ocean into mill-ponds,
and bottle up the Force of Gravity, to be sold by retail in gas jars; then
we may hope to comprehend the infinitudes of man's soul under for-
mulas of Profit and Loss ; and rule over this too, as over a potent engine,
by checks, and values, and balances.

(*c*) If the time should ever come when what is now called Science,
thus familiarised to men, shall be ready to put on, as it were, a form of
flesh and blood, the poet will lend his divine spirit to aid the transfigura-
tion, and will welcome the Being thus produced as a dear and genuine
inmate of the household of man. It is not then to be supposed that any
one who holds that sublime notion of Poetry, will break in upon the
sanctity and truth of his pictures by transitory and accidental orna-
ments, and endeavour to excite admiration of himself by arts the neces-
sity of which must manifestly depend upon the assumed meanness of
his subject.

(*d*) He was sprung from a house, ancient indeed and noble, but
degraded and impoverished. The kinsman whom he had succeeded had
died poor, and, but for merciful judges, would have died upon the
gallows. He had great intellectual powers, yet there was one unsound
part in his mind. He had naturally a generous and tender heart, but
his temper was wayward and irritable. He had a head which statuaries
loved to copy, and a foot the deformity of which the beggars on the
streets mimicked. Distinguished at once by the strength and the weak-
ness of his intellect, affectionate and perverse, a poor lord and a hand-
some cripple, he required, if ever man required, the firmest and most
judicious training.

SECOND HALF.

Examiner—BEJOYGOPAL MUKHERJEE, ESQ., M.A.

Full marks—50.

The questions carry equal marks.

Answer any THREE *questions.*

1. Compare Scott and Jane Austen as novelists, giving illustrative references in support of your remarks. Justify the statement that "Northanger Abbey is throughout a satire on the fictional method of the authoress of The Mysteries of Udolpho."

Or,

Sketch any *one* of the following characters:—

Jeanie Deans; Fanny Price; Mr. Collins; Henry Morton; Saladin.

2. Sketch the story and the leading characters of any *one* of the following novels:—

Waverley; Kenilworth; Emma; Guy Mannering; Ivanhoe; The Bride of Lammermoor.

3. What are the peculiar characteristics of Lamb as an essayist? *Either*, give a brief outline of any *one* of his essays, *or* explain the statement that "if he defends Hogarth from the sentimentalists, he defends Shakespeare from the realists."

4. What is your estimate of Hazlitt as a critic? Give the substance of any *one* of his essays.

5. Show your acquaintance with any *one* of the following:—.

Melmoth the Wanderer; Frankenstein; Castle Rackrent; Destiny; Richelieu; Pelham; Mothers and Daughters; The Annals of the Parish.

ENGLISH.

GROUP A.

EIGHTH PAPER.

Examiners— { DR. H. STEPHENS, M.A., D.D.
REV. DR. G. HOWELLS, M.A., PH.D., B.LITT., B.D.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write an Essay on *one* of the following subjects:—   100

(*a*)   Paradise, and groves
Elysian, Fortunate Fields—like those of old
Sought in the Atlantic Main—why should they be
A history only of departed things,
Or a mere fiction of what never was?

For the discerning intellect of Man.
When wedded to this goodly universe
In love and holy passion, shall find these
A simple produce of the common day

<div align="right">—<i>Wordsworth.</i></div>

(b) "The poets of the Elizabethan age—excepting perhaps Spenser—seem to have got on very happily and successfully without theories of human life or doctrines respecting human society, but our nineteenth century poets are almost all sorely puzzled about certain problems of existence, and having laboured at their solution, come forward with some lightening of the burden of mystery, with some hope or some solace."—*Dowden.*

(c) The nineteenth century novel stands in the same relation to life as the drama in the Eizabethan age.

(d) English Satire in the Eighteenth Century.

(e) The golden age, which a blind tradition has hitherto placed in the Past, is Before us.—*Carlyle.*

(f) "Might is Right" *versus* "Right is Might."

ENGLISH.

Group B.

Fifth Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

First Half.

Examiner—T. S. STERLING, ESQ., M.A.

1. Render into Modern English *three* of the following passages :—

(1) Þā ic þā ðis eall gemunde, ða gemunde ic ēac hū ic geseah, ǣr ðǣm ðe hit eall forhergod wǣre ǫnd forbærned, hū ðā ciricean giond eall Anglecynn stōdon māðma ǫnd bōca gefylda, ǫnd ēac micel menigeo Godes ðīowa; ǫnd ðā swīðe lȳtle fiorme ðāra bōca wiston, for ðǣm ðe hīe hiora nānwuht óngiotan ne meahton, for ðǣm ðe hīe nǣron ōn hiora āgen geðīode āwritene.

(2) Þæt Estland is swȳðe mycel, and þǣr bið swȳðe manig burh, and on ǣlcere byrig bið cyninge. And þǣr bið swȳðe mycel hunig, and fiscnað; and se cyning and þā rīcostan menn drincað mȳran meolc, and þā unspēdigan and þā þōowan drincað medo. Þǣr bið swȳðe mycel gewinn betwēonan him. And ne bið ðǣr nā nig ealo gebrowen mid Estum, ac þǣr bið medo genōh.

(3) Nū sēo burg swelc is, þe ǣr wæs ealra weorca fæstast ǫnd wunderlecast ǫnd mǣrast, gelīce ǫnd hēo wǣre to bisene āsteald eallum middangearde, ǫnd ēac swelce hēo self sprecende sīe tō

eallum monncynne ond cweþe : ' Nū ic þuss gehroren eam ond aweg-
gewiten, hwæt, gē magan on mē ongietan ond onenāwan þæt gē
nānuht mid ēow nabbað fæstes ne strongos þætte þurhwunigean
mæge.'

(4) Wæs hē se monn in weoruldhāde geseted oð ðā tide þe hē
wæs gelȳfedre yldo, and hē nǣfre ǣnig lēoð geleornade : and hē for
þon oft in gebēorscipe, þonne þǣr wæs blisse intinga gedēmed, þæt
hīe ealle sceolden purh ondebyrdness bo hearpan singan, þonne
hē geseah þā hearpan him nēalǣcan, þonne ārās hē for sceme from
þǣm symble, and hām ēode tō his hūse.

2. Write out the principal parts of all the verbs and participles in   6
l (4).

3. Answer *one* of the following :—   6
(1) Estimate the importance of the Saxon chronicle in the his-
tory of the English Language.
(2) Classify Old English nouns. Give examples of each class.
(3) What are the characteristic features of Old English prose
with regard to (*a*) subject-matter, (*b*) style ?

Unseen.

4. Translate into Modern English :—
Đisum eallum ðus gedōnum, ēode Apollonius, se mǣra cyning.
wið ðā sǣ. Đā geseah hē tone ealdan fiscere, ðe hine ǣr nacodne
underfēng. Đā hēt se cyning hine fǣrlice gelǣccean, and tō ðǣre
cynelican healle gelǣ dan.
Đā-ðā se fiscere ðæt geseah, ðæt hine ðā cempan woldon niman.
ðā wēnde hī ǣrest ðæt hine man sceolde ofslēan ; ac, mid-ðām-ðe hē
cōm intō ðæs cyninges healle, ðā hēt se cyning hine lǣdan tōforan
ðāre cwēne, and ðus cwæð : " Ealā, ðū ēadge cwēn, ðis is mīn
tācenbora, te mē nacodne underfēng, and mē getǣhte ðæt ic tō ðē
becōm." Đā beseah Apollonius se cyning tō ðam fiscere, and cwæð.
" Ealā, welwillenda ealda, ic eom Apollonius se Tyrisca, ðǣm ðū
sealdest healfne tīnne wǣfels." Him geaf ðā se cyning twā hund
gyldenra peninga, and hæfde hine tō gefēran ðā-hwīle-ðe hē lifde.

SECOND HALF.

Examiner—R. C. GOFFIN, ESQ., M.A.

1 Translate *one* of the following passages :—   13

(*a*)   Þā ðǣr sōna wearð
edhwyrft eorlum,   siþðan inne fealh
Grendles mōdor ;   wæs se gryre lǣssa
efne swā micle   swā bið mægþa cræft,
wiggryre wīfes   be wǣpnedmenn,
þonne heoru bunden,   hamere gepuren,
sweord swāte fāh   swīn ofer helme
ecgum dyhtig   andweard scireð·
þā wæs on healle   heardecg togen,
sweord ofer setlum   sīdrand manig
hafen handa fæst ;   helm ne gemunde,
byrnan sīde,   þe hine se brōga angeat.

(b)   Wāt sē þe cunnað
    hū slīþen bið   sorg tō geféran
    þām þe him lȳt hafað   lēofra geholena :
    warað hine wrǣclāst,   nāles wunden-gold.
    ferðloca frēorig,   nāles foldan blǣd :
    gemon hē selesecgas   and sincþege,
    hū hine on geoguðe   his goldwine
    wenede tō wiste :   wynn eall gedrēas.
    For þon wāt sē þe sceal   his winedryhtnes
    lēofes lārcwidum   longe forþolian,
    ðonne sorg and slǣp   somod ætgædre
    earmne ānhagan   oft gebindað.

2. Translate, with notes on the words in italics, any *three* of the   12
following :--

    (a)   ne wæs þæt *gewixle* til,
        þæt hiē on bā healfa   began sceoldon
        frēonda fēorum.

    (b)   se mere standeð,
        ofer þǣm hongiað,   *hrīmge* bearwas,
        wudu wyrtum fæst,   wæter oferhelmað.

    (c) wīcinga ār,   wordum mǣlde,
        sē on bēot ābēad   *brimlīþendra*
        ǣrende tō þām eorle,   þǣr hē on ōfre stōd

    (d) oferdrencte his duguðe ealle, swylce 'hie wǣron dēaðe
            geslegene,
        āgotene gōda gehwylces.

    (e) ·   *for þon* mē hātran sind
        Dryhtnes drēamas   þonne þis dēade līf
        lǣne on londe.

3.   *Either,*

Give a summary account of Old English verse types,   5

                                or,

Write a note on the *Charms* as illustrative of Anglo-Saxon popular
poetry.

4. Translate :--   20
                    (From *The Battle of Brunnanburh*).

        Swilce þǣr ēac se frōda   mid flēame cōm
    on his cȳþþe norð   Constantīnus,
    hār hilderinc,   hrēman ne þorfte
    mēca gemānan :   hē wæs his māga sceard,
    frēonda gefylled   on folcstede,
    beslægen æt sæcce,   and his sunu forlēt
    on wælstōwe   wundum forgrunden,
    geongne æt guðe. Gylpan ne þorfte
    beorn blandenfeax   billgeslihtes,
    eald inwitta,   nē Anlāf þȳ mā ;
    mid heora herelāfum   hlihhan ne þorfton
    þæt hī beadoweorca   beteran wurdon
    on campstede   cumbolgehnāstes,
    gārmittingo,   gumena gemōtes,
    wǣpengewrixles,   þæs hē on wælfelda
    wiþ Ēadweardes   eaforan plegodon.

ENGLISH.

GROUP B.

SIXTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—S. C. DE, ESQ., M.A.

1. Translate (with notes other than those on italicised portions) **24**
into modern English prose any *three* of the following five passages :—

(*a*) ' God wot' quod wysdom · ' þat were nauȝte þe beste ;
And he amendes mowe make · late meynprise hym haue ;
And be *borwgh* for his bale · and biggen hym bote,
And so amende þat is mysdo · and evermore þe bettere.'
　　Witt acorded þer-with · and seide þe same :
" Bettere is þat bote · bale adoun brynge,
þan bale be *ybette* · and bote neuere þe bettere.'

(*b*) Ensample ', quod sche, ' tak of this tofore
That fro my quhele be rollit as a ball ;
For the nature of It is evermore,
After ane hicht, to vale and gene a fall,
Thus, *quhen me likith*, vp or doune to fall.
Fare wele ', quod sche, and by tho ere me toke
So ernestly, that therwithall I woke.

(*c*) Also herewiþal into þe open siȝt of ymagis in open chirchis
alle peple, men and wommen and children, mowe come whanne
euere þei wolen fn ech tyme of þe day, but so mowe þei not come
in-to þe vce of bokis to be delynered to hem neiþer to be red
bifore hem ; and þerfore as forto soone and ofte come into re-
membraunce of a long mater bi ech oon persoon, and also as forto
make þat þe mo persoones come into remembraunce of a mater,
ymagis and picturis seruen in d specialer maner þan bokis doon.

(*d*) He kepte his pacient a ful greet del
In houres, by his magic naturel.
Wel coude he fortunen the ascendent
Of his images for his pacient.
He knew the cause of everich maladye,
Were it of hoot or cold, or moiste, or drye,
And where engendred, and of what humour.

(*e*) So mot I *theen* thou art a propre man,
And lyk a prelat, by seint Ronyan !
Seyde I nat wel ?　I can nat speke in terme ;
But wel I woot, thou doost my herte to erme,
That I almost have caught a cardiacle.
By *Corpus* bones ! but I have a triacle,
Or elles a draught of moyste and corny ale,
Or but I here anon a mery tale.
Myn herte is lost or pitee of this mayde.

2. Write philological and explanatory notes on the italicised   6
portions of Question 1.

3. Give the prosodiacal characteristics of the passages (*a*) and (*b*)   6
of Question 1, and scan the first two lines of the passage (*d*) of Question 1.

4. Discuss the authorship, language, and subject-matter of Peres   12
the Ploughmans Crede.

5. Compare Chaucer and Langland as satirists.

Or,

Describe the principal types of female character in Chaucer's   12
Canterbury Tales.

SECOND HALF.

Examiner—T. S. STERLING, ESQ., M.A.

1. Render into modern English *four* of the following passages,   40
adding metrical, etymological and grammatical notes :—

(1) Þo was þer wepeing in þe halle,
     And grete cri among hem alle ;
     Unneþe miȝt old or ȝong
     For wepeing speke a word wiþ tong.
     Þai kneled adoun al yfere,
     And praid him, ȝif his wille were,
     Þat he no schuld fram hem go ;
     ‘ Do way ’, quaþ he, ‘ it schal be so.’

(2) And efterward ful some onane
     Into þe toure þe knight gan gane ;
     Thurgh þe hole gan he pas.
     Til he come whare þe lady was.
     Bitwene þam was grete joy and blis ;
     In armes ful curtaysly þai kys.
     Wele sho wist it was þat knyght
     Þat sho had dremyd of anyght.
     Sho said : ‘ Sir, þou art welkum, here,’
     He said : ‘ Gramercy, lady dere.’

(3) And þan the fewle commes, and ligh·es apon þe awter, and
fanneȝ with his wenges ay till þo forsaid thinges be sett on fire ; and
þare he brynnes himself all till asches. On þe morue þai fynd in þe
asches as it ware a worme ; on þe secund day þat worme es turned
till a fewle perfitely fourmed; and on þe thridd day it flies fra
þat place to þe place whare it was wont to dwell. And so þer es
nevermare bot ane.

(4) He cleopede on his cnihtes : ‘ ȝarewieth eow to fihte,
     For nu is mid ferde icumen Cassibellannus.’
     Heo liðede togadere mid heore speren longe,
     Mid axen, mid sweorden, mid scærpe speres orde,
     Hardliche heo heowen ; hælmes þer gollen.
     Feondliche heo feohten ; hafdes þer feollen.

(5) Þa answarede Cordoille, lude and ho wiht stille,
     Mid gomene and mid lehtre to hire fader leve :
     ‘‘ Þeo art me leof al so mi fæder, and Ich þe al so þi dohter ;
     Ich habbe to þe soþfaste love, for we buoᵹ swiþe isibbe ’’ :
     Þus seide þe mæiden Cordoille, and seoððen set swiþe stille.

ENGLISH.

GROUP B.

SEVENTH PAPER.

Candidates are required to give their answers in their own words
as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—SUNITIKUMAR CHATTERJEE, ESQ., M.A.

Answer THREE *questions only.*

1. Institute a morphological comparison between English and
Sanskrit.
   Explain the following equations :—

> Skt. *bandhana* — OE. *bindan.*
> ,, *ni-dāghaḥ* — Gothic *dags*, OE. *dœg*,
> ,, *śaśáḥ* — Eng. *hare.*
> ,, *śrutá* — Eng. *loud.*
> ,, *catúr* — Eng. *four.*

2. Give primitive Teutonic forms for *six* of the following words,
and comment on the transformations they have undergone in Eng-
lish: *whole, tooth, guest, listen, tear, brought, hart, think, third,
yeoman.*   *Or,*

Give an account of the primitive Teutonic vowel-system, with the
Old English equivalents of the Teutonic vowels, illustrating by means
of examples in each case.

3. Describe the conjugational system of primitive Teutonic or
Old English, and compare it with that of Modern English.
   How would you explain the *-t* in OE. *scealt, liest,* and *gebroht* ?

4. Classify the languages of Europe morphologically as well as
genealogically, and state briefly in what way English has been in-
fluenced by the more important of these.

5. Apply some of the principles of linguistic development to the
history of the transformation of primitive Indo-European to Modern
English.

SECOND HALF.

Examiner—PRAPHULLACHANDRA GHOSH, ESQ., M.A.

1. Give a brief history of Modern English spelling.   16
              Or,

Write a note on Semetic Contribution to the English Vocabulary.

2. Write a note on the Dialectical elements of pre-Chaucerian   16
London English.   *Or,*

Indicate the effects of French influence on Middle English Syntax.

3. Write a note on the differences between the language of Chau-   18
cer's poetry and that of his prose.

Or,

Write an essay on the English of Shakespeare.

ENGLISH.

GROUP B.

EIGHTH PAPER.

Examiner—DR. H. C. MOOKERJEE, M A., PH.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Write an Essay on one of the following subjects :—   100
1. The influence on Anglo-Saxon literature of the introduction of
Christianity into England.
2. "The worth and importance of Anglo-Saxon literature have
been greatly exaggerated."
3. A picture of medieval England, as gathered from the literature
of the time.
4. The value of second-rate literature.
5. " Rhyme and metre in poetry are survivals of a childish age."

SANSKRIT.

FIRST PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

The answers to this half should be written in Sanskrit.

FIRST HALF

Examiner—PANDIT SITARAM SASTRI.

1. (अ) (क) विच्छितयोरन्यतरखोत्तरं कृत्वा चकाराङ्कितो   10
व्याख्येयः ।

    (अ) युक्तो हि षेन्द्रं कम्बिदधब्रु-

      हुराग्निन्मनसा परियन् ।

      तीर्थेनाच्छां तातृषाणमोको

      दीर्घं न सिधमाकृणोत्यध्वा ॥ १ ॥

रेखाङ्कितपदानां व्युत्पत्तिप्रदर्शनपूर्वं व्याख्येयोऽयं रुन्तः ।
किज्ञात्र छन्दः ?

    (क) कुतरा पूर्वं कतराऽपरायोः
      कथाजाते कवयः को विवेद ।
      विश्वं त्मना विभृतो यद्धनाम्
      विवर्तेतं अह्नी चक्रियेव ॥

कस्मिन्कर्मैषेतस्या विनियोग इति प्रदर्शे घर्गे व्याख्येया :
का चात्र देवता ?

    (च) अररिन्दानि, राग्विनथं, विद्युत्मतीनाम्, सुसंसुब्धम्,
जुजुर्वान्, कर्वध्यम्, अश्वान्, पृत्सुषु, गर्भस्तिपूतम् ।
व्युत्पादनीया एते शब्दा अर्थव्युत्पत्तिदर्शनपूर्वकम् ।

2.   अयाखामन्यतमखोत्तरं विलेखनीयम् ।   10
    (१) अकूर्दन्न्यायत्यर्थो इन्ति पगायती ।
      अर्थं अवयतो इन्त्यर्थो पिनष्टि पिंषती ॥

सन्दर्भंशोधनपुरस्सरमेतच्च व्याख्यानं कार्यम् । पूर्वोक्तन्नूर्ह स्वर-
प्रचारश्च संप्रदर्श्यः ।

(२) होताध्वर्युरावया अग्निमिन्धो-
ग्रावग्राभ उत शंस्ता सुविप्रः ।
तेन यज्ञेन स्वरं कृतेन
स्विष्टेन वक्षणा आपृणध्वम् ॥ १ ॥

सदृश्यो रत्र एदृश्योरिदुर्ष्वा
दीर्घं सचन्ते वरुणस्य धाम ।
अनवद्याःश्रितं योजना-
न्येकेका क्रतु परियन्ति सद्यः ॥ २ ॥

रेखाङ्कितपदव्युत्पादनपुरस्सरं व्याख्येये इमे ऋचौ ।

(अ) प्रथमायां होत्रादयः के ? कुत्र चैषामुपयोगः ? आवयाः
पदं च कमवबोधयति ?

(ब) द्वितीयायां सदृश्योशब्दस्यार्थः कः ? अद्य श्व इति पदयोः
सान्निध्ये बहुवचनस्योपपत्तिः कथम् ?

(ग) एतन्माण्योपरि अर्वाचीनैः किमात्तिप्यते ? भाष्याच्चरा-
विपर्यास तथ्य समीचीनसमाधानस्य सत्त्वे तथ्य प्रदर्शनं कार्यम् ।

(३) ऋचो अक्षरे परमे व्योम-
न्नस्मिन्देवा अधि विश्वे निषेदुः ।
यस्तन्न वेद किमृचा करिष्यति
य इत्तद्विदुस्त इमे समासते ॥

सायणभाष्यसरख्येतन्मन्त्रार्थं विवृत्य, वेदानां विभिन्नकालि-
कर्त्वमिति मते 'ऋग्वेदकाले आत्मविज्ञानाभाव आसीद्' इत्युक्तिर्युज्यते
न वेति सम्यक् परीच्य कस्य युक्ततेति विलेख्यं ?

3. (क) (ख) चिह्नितयोरन्यतरो व्याख्येयः ।

(क) सदुष्ठदेवः सविता सवायं
शश्वत्समं तर्त्पा वह्निरस्यात् ।

अत्र सविता वह्निर्वाज्यो वा ? अन्यश्चेत्कुत इति सप्रमाणं
प्रदर्शनीयम् । अन्यार्थे सवितृशब्दस्य प्रयोगेऽत्र प्रवृत्तिनिमित्तं किं,

10

कुतश्च ? वङ्क्ष्वावितृत्ते किं बाधकम् ? अत्र सवपदार्थविषये मत-
भेदश्चेत्, स कः ? कस्य युक्तता ? तदपाः शब्दस्य क्रियाविशेषणत्वे
किं विरुध्येत ?

(ख) नानौकांसि तुर्यौ विश्वमायुर्वि-
तिष्ठते प्रभवः श्लोको श्रुभूः ।

अत्र '(रात्र्यां प्रवृत्तायां प्राणिनां)' नाना विभिन्नानि श्लोकांसि
स्थानानि दुःखविह्वलानाभ्रुवन् (दिने व्यवहारार्थं विभिन्नस्थलेषु प्रस्तता
रात्रावेक्ष्यानस्याः सञ्जाताः) इत्यर्थकरणे किं नोपपद्यते ? आकल्प-
विभक्तस्य 'तुर्यं' इति पस्स 'हुः, यः' इति विभिन्नपरकरणं दुष्टमदुष्टं
वा ? दुष्टत्वे तत्साधकान्यैतदर्थंगतानि प्रमाणानि संप्रदश्योनि ।

4.   उत्तरयोरन्यतरस्योत्तरं विलेख्यम् ॥   10

(१) यादृाध्यं१ वरुणो योनिमप्यस्
निश्रितं निर्मिघ जभुगाणः ।
विश्वा मातॄण्डा व्रजमा पशुर्गात्-
स्यग्रे जन्मानि सविता व्याकः ॥

अत्र प्रथमाङ्ग्रेस्य कोऽर्थः ? कश्च तत्र मतभेदः ? कस्य युक्तता ?
वरुणशब्दस्थले 'वारुणः' इति पाठकल्पने किं विरुध्यते ? यादृाध्य-
मित्यस्य 'अतिश्रीघ्रम्' इत्यर्थकरणे खादृा का-च-नानुपपत्तिः ? का
सा ? कस्तर्हि तदर्थः ?

(२) यादृाध्यमित्यत्र 'यादृ, राध्यस्, इति पदविभागो युक्तो
न वा ?

न चेत् कुतः ?

स्वातं संमैतुं दुच्छुना हरस्वतौ ।

अत्र स्वराविरोधिनी दुच्छुनाशब्दस्य कीदृशी व्युत्पत्तिः ?
कस्तदर्थः ।

पिता यच्चानामसुरो विपश्चितां
विमानमग्निर्वंयुनं च वाघताम् ।

वाक्छुतशब्दयोर्वर्गविकारादिना 'वाघताम्' इति पस्स साधने
किं विरोधकारि ? को तर्हि तस्य व्युत्पत्त्यर्थौ ?

5. वेश्वार्थविचारे उदात्तादिस्वराणामुपयोगित्वसुदाहरणमुखेन   10
प्रदर्शनीयम् ।

SECOND HALF.

Examiner—PANDIT PASUPATINATH SHASTRI, M.A.

Any ONE *of the first two questions and any* TWO *of the next three are to be attempted.*

1. (a) Who are the Ribhus, and what are their functions?   20
    (b) What are the particulars that are related of Rudra in your text-book?
2. Give an estimate of the state of civilisation as appears from   20
the Second Astaka of the Rig Veda.
3. What are the arguments that you can advance to show that   15
the Mantras have no meaning?
4. How do you establish the proposition that the injunction   15
' स्वाध्यायो s ध्येतव्यः" extends to interpretation also?

5. Fully explain the following couplets:—   15

वायुवो इत्येवमादेरर्थवादस्य मानता ।
न विधेयेऽस्ति धर्मं किं किं वास्यो तत्र विद्यते ॥
विध्यर्थवादश्याख्यानं मिथोऽपेक्षापरित्त्वयात् ।
नास्त्येकवाक्यता धर्मे प्रामाण्यं समवेत् कुतः ॥
विध्यर्थवाद्यो साकांत्त्यो प्राश्रस्त्यपुरुषार्थयोः ।
हेनैकवाक्यता तस्माद् वादानां धर्ममानता ॥

SANSKRIT.

SECOND PAPER.

FIRST HALF.

Examiner—PANDIT PRABHATCHANDRA KABYATIRTHA, M.A.

Candidates are required to give their answers in their own words as far as practicable.

Candidates are permitted to attempt TWO *questions only.*

All the questions are of equal value.

Full marks— 50.

1. (a) Explain fully and illustrate any two of the following rules:—

इल~्यम् । नवेति विभाषा । स्थानेऽन्तरतमः । इसुषोः सामर्थे । षष्ठी
स्थानेयोगा । घात्तोस्तन्निमित्तंचेव ।

(*b*) Refer to the context and explain two of the following :—

अकृतव्यूहाः पाणिनीयाः । अर्थवद्ग्रहणे नानर्थकस्य ग्रहणं । व्यवस्थित-
विभाषया गवाक्षः । अन्तवम्नावेन पदान्तरैफस्य न विषरौ: । सामर्थ्यमित
व्यपेक्षा ॥

(*c*) Write what you know on the euphonic combination (सन्धि) in three of the following :—

तच्छिवः । षष्ठक्षमुः । पुंकोकिलः । गत्राग्रं । पुना रमसे । सुध्युपास्यः ।

2. (*a*) Bring out clearly the meaning of any two of the following rules :—

अर्थवन्धातुरप्रत्ययः प्रातिपदिकम् । यस्मात् प्रत्ययविधिस्तदादि-
प्रत्ययेऽङ्गम् । आद्यान्तवदेकस्मिन् । न लुमताऽङ्गस्य । येचे लोपः ।

(*b*) Refer to the context and explain two of the following :—

"अग्रुभ्य" इति वक्तव्यं कृतास्ऽत्वनिर्देशो जसशसोर्विषये च्वात्वं
ज्ञापयति । यथोद्देशपत्ते षष्ठीं परिभाषां प्रति अन्वर्थसिद्धतयाऽन्तरङ्गाभावे
परिभाषाया अप्रवृत्तः । "आत:" इति योगविभागादधातोग्याकारलोपः
क्वचित् । यथोत्तरं मुनीनां प्रामाख्यम् ।

(*c*) Cite the rules and show their applications in the formation of two of the following forms :—

कृति । विश्वपौ । वारैणि । प्रतिद्वान् । अग्रुमुयङ् । युक्षाक्षम् ।

3. (*a*) Explain fully and illustrate any two of the following rules :—

यत्तम्ब निद्धाराक्षम् । अककृपितं च । षष्ठी शेषे । यस्य च भावेन
भावलक्षणम् । ध्रुवमपायेऽपादानम् ।

(*b*) Discuss thoroughly two of the following :—

तमब्प्रहणं किम् ? गङ्गायां घोषः । अर्थनिवन्धनेयं संज्ञा । उपपद-
विभक्तिः कारकविभक्तिर्वलीयसी । विवक्षातः कारकाणि भवन्ति ।

(*c*) Dwell at some length on the main grammatical points involved in any two of the following :—

प्रकौयतां रामरणाय मैथिली । नरकस्य जिघ्नुः । उत्पथेन पथे गच्छति ।
षर्पिषोऽपि स्यात् । माषमाक्षे । शब्दानामनुशासन माचार्यस्य ।

4. (*a*) Explain fully and illustrate any two of the following rules :—

तत्सुरुषः समानाधिकरणः कर्मधारयः । समर्थः पदविधिः । अनेक-
मन्यपदार्थे । चार्थे द्वन्द्वः । तत्रोपपदं समसीय्यम् ।

(*b*) Write a brief commentary, explanatory and critical, on each of the following :—

समासस्तुर्घेति प्रायोवादः । गम्यखेल्ते तदेकान्तप्रदृष्यसु ।

(*c*) Write short grammatical notes on two of the following :—

पद्मगन्धिः । बुद्धिमान्द्यसु । खादतमोदता । शीतोष्णसु । पारस्करः । सर्वंस्वतः ।

5. (*a*) Explain fully and illustrate any two of the following rules :—

तस्येदम् । तेन रक्तं रागात् । तद्विनस्सासर्वुविभक्तिः । वोत्तोगुण-वचनात् । अध्वनो यत्खौ । द्विगोः । अजाद्यतष्टाप् ।

(*b*) Give both प्रकृति and प्रत्यय of three of the following, referring to the rules in each case :—

पौरुषेयः । स्त्रेणः । गुवतिः । सूरी । आर्यिका । दाधिकं । पाञ्चुपतं ।

(*c*) Elucidate any two of tho following :—

आकृतिग्रहणा जातिः । अत्र हि समासार्षसमाहारनिघ्नं स्वीखं । अकृतव्यूहपरिभाषया सावुल्यितिमर्षभूत् । "सिद्धे यखेति लोपेन किमर्घं ययतो डितौ" ।

SECOND HALF.

Examiner—PANDIT SAKALNARAIN SARMA.

Candidates are required to give their answers in their own words as far as practicable.

Full marks—50.

(सिद्धान्तकौमुद्या उत्तरार्द्धे प्रश्नाः)

Answer any FIVE *questions, which are all of equal value.*

1. श्रिषा शपाऽनुबन्धेन निर्दिष्टं यद्गाखेन च । यत्रेकाज् ग्रहणज्ञैव पञ्चेतानि न यङ्लुकि ।

अजन्तोऽकारवान् वायस्ताञ्जनिट् थलिवेडयसु । कृदन्त इदृङ्नित्यानिट् क्राद्यनो लिटि षेड् भवेत् । अनयोः काचिदेका कारिका समसाणं सोदाहरणं व्याख्यायताम् ।

2. भवतादियत्र कथं न ङिघेतिझास्खय प्रवृत्तिः ?
अखतुरित्यत्र कथं न हृखो हृश्यते ? ह्वयोरेकखैवोत्तरमपेक्षितमस्ति ।

3. महर्षे च मन्त्रोपपदे मन्यते उत्तम एकवच्व, सन्वल्लघुनि चङ्
परेऽनगलोपे, रयायाषम्ब, तृतृभ्यः ष्यसनोः, ऊदुपधाया गोहः, हलिङि,
रक्ष्म, खिठिवयो यः, ग्रत्र केषाञ्चित् चतुर्णां सूत्राणां षोदाहरणा ग्रर्थो
लेखनीयाः ।

4. ग्रक्कुशावीत्, जुहुवाञ्चकार, दिदीये, विष्णोष्यति, ग्रभर्ज, ग्रानन्त्,
ग्रवदिषति, बोध्यते । वरीवर्ति । ग्रत्रत्यानां केषाञ्चित् चतुर्णां प्रयोगाणां
साधुत्वं कार्यविशेषप्रदर्शनपूर्वकं विधेयम् ।

5. वैवक्तः क्रिम्पति, विद्यामाददाति, गुप्तः प्रतिष्टुति, पौठालुतिष्ठसे,
स्वरान् विकिरोति, ग्रनून् पराजयति, ग्रस्तं संदशीति, राम उपरमसे, ग्रत्र
केषाञ्चित् त्रयाणां वाक्यानां सप्रमाणं संशोधनं कर्त्तव्यम् ।

6. प्रतिश्रयेन एधसे । पुनः पुनर्गच्छति । ओज इव्राचरति । विद्वांषमाचष्ट ।
पूर्वोक्तेषु विग्रहेषु कीदृश्रानि रूपाणि ?

7. पच् मषज् रधे ग्रो प्यायी एषां लुङि प्रथमपुरुषैकवचने कीदृशाः
प्रयोगाः किज्व तत्र प्रमाणम् ?

SANSKRIT.

THIRD PAPER.

FIRST HALF.

Examiner—DR. I. J. S. TARAPOREWALA, B.A., PH.D.

Candidates are to choose any FIVE questions, of which THE FIRST QUESTION must be one.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Full marks—70.

1. "The sentence is the unit of the language." Comment upon 22
this statement. Discuss how every sentence may be reduced to a
fundamental formula—*subject plus predicate*? How do extensions of
the subject and predicate arise? What is the distinction between
subject and object?

2. What are the main groups of the languages of the world? 12
What position is occupied by the I.E. languages (a) geographically
and (b) according to grammatical structure?

34

3. What do you understand by the terms: *Junggrammatiker,*   12
Fortunatov's law, Urgeschichte and *Contamination* ?

4. Trace the history of Grimm's Law of Sound Shifting, showing   12
clearly how the dictum " phonetic laws have no exceptions " came to
be established.   What are the limitations of this dictum ?

5. Trace the origin of *six* of the following sounds in Sanskrit: श,   12
ष, ग्. ट, व, य, म, ह, ऋ.

6. Give a short but clear account of the verbal system of Sanskrit   12
and indicate how far the Vedic verb differs from the verb as used in
Classical Literature.

7. What do you understand by *Analogy* ?   How far is it a determin-   12
ing factor in the growth of a language ?   Illustrate by means of
examples.

8. Trace the history of the उपसर्ग in Sanskrit and compare with   12
it the development of the preposition in English.

9. How does the pronominal declension differ from that of the   12
other *subantas* ?   Give a short philological survey of the various forms
used in the declension of *either* the interrogative pronoun *or* the pro-
noun युष्म्.

‘ ”   SECOND HALF.

*Examiner—*MAHAMAHOPADHYAYA GURUCHARAN TARKA-
DARSANATIRTHA.

*Candidates are required to give their answers in their own words
as far as practicable.*

Full marks—30.

पञ्चसु प्रश्नेषु यथाज्ञाम्युत्तरं कार्य्यं ।

1.   बहुपदकबहुव्रीहि समासानङ्गीकारे को दोषः ?   10

2.   समासशक्तिवादः कया युक्त्या कथ सम्मतः ? तत्र च   10
जगदीशश्रस्यसम्मतो का युक्तिः ?

3.   नामार्थयोरमेदान्वयसम्बन्धेनान्वयानन्वययोः कुत्र का युक्तिः ?   10

4.   द्विगुकर्म्मधारययोस्तल्पुरुषावयवीभावयोश्च   परस्परं   कः   10
प्रमेदः ?

5.   कः समासः सर्व्वपदप्रधानः ? तथ च किं जगदीशसम्मतं   10
लक्षणं ? कति च तथ विभागाः ?

SANSKRIT.

FOURTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—DR. P. D. GUNEH, PH.D.

Write an essay in English, discussing the question how far the   50
known and published Sanskrit literature enables us to trace a con-
tinuous history of ancient India ?
                              Or,
Write an essay in English, discussing the question how far it is
possible to ascertain the date of the Vedic literature with accuracy.

SECOND HALF.

Examiner—MAHAMAHOPADHYAYA DR. SATISCHANDRA VIDYA-
BHUSHAN, M.A., PH.D.

Write an essay in English on *one* only of the following subjects :—   50
  (1) The development of Ancient Indian polity.
  (2) The development of dramatic ideas, as illustrated by repre-
      sentative Sanskrit dramas.
  (3) The development of ritualism from the Vedas down to the
      Brahmanic period.
  (4) Vedic exogesis in ancient times.
  (5) The origin and development of the doctrine of Māyā (माया).
  (6) The nature of emancipation (मुक्ति) and the means for attain-
      ing it, as inculcated in the Yoga philosophy.
  (7) The problem of sufferings (दुःख) and their remedy, as pro-
      pounded respectively in the Sānkhya and Nyāya systems
      of philosophy.
  (8) The Rajatarangini as a historical work.
  (9) The development of the Brāhmi Lipi.
  (10) The history of the reign of Aśoka, as derivable from his in-
      scriptions.

SANSKRIT.

GROUP A.

FIFTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—MAHAMAHOPADHYAYA KALIPRASANNA BHATTA-
CHARYYA, M.A.

THREE *questions only are to be answered, of which one must be either
Question* 2 *or Question* 3.

1.   उपमा कालिदासस्य भारवेरर्थगौरवम् ।
      नैषधे पदलालित्यं माघे सन्ति त्रयो गुणाः ॥

(*a*) Illustrate the above by quotations from your texts.   6

(*b*) Who is the originator of the Science of Sanskrit polity   2
(नीतिशास्त्र) ? Name the principal authorities on the subject.

(*c*) What are the principal constituents of a kingdom (राज्य) and   7
of a circle of kings (मण्डल) ? Enumerate the chief attribute of a
विजिगीषु (king).

2.   (1) तदा निस्स्वानतमां घनं घनं
          ननाद तस्मिन् नितरां ततं ततं ।
          अवापुरुच्चैः सुषिराणि राविता
          समानमानद्धमियत्तयाध्वनीत् ॥

      (2) पदद्वये ऽस्या नवयावराञ्जना
          जनैरुदानीमुदनीयतार्पिता ।
          विराय पद्मौ परिरभ्य जाग्रती
          निम्नौव विस्मिथ्य नवा रविद्युतिः ॥

(*a*) Explain sloka (1) after the manner of मल्लिनाथ.   6

(*b*) Explain the formation of निस्स्वानतमां and give the deriva-   4
tion of सुषिर and रविता in sloka (1).

(*c*) Give, in Sanskrit or English, the substance of sloka (2). .   6

(*d*) Point out the figures of speech (अलङ्कार) in slokas (1) and   4
(2).

3. (1) तश्र तदञ्जस्य बिभर्त्ति विश्वसं
    विश्रेषणामोश्रमुचः स्फुरद्रुवः ।
    इरस्फुटत्काञ्जनकेतकीदलात्
    सुवर्यमस्यखति शौरभं यदि ॥

   (2) जितसदाखेन कखानिधिर्दधे
       स्त्रिचन्द्रधी शास्त्रिकमायकायताम् ।
       तथापि जिव्ये युगपत् सखीयुग-
    .   प्रदर्शितास्यॅबहूभविष्णुना ॥

(a) Give, in Sanskrit, the substance of *either* of the above slokas.   6
(b) Give the different meanings of विश्वस in sloka (1) and give   4
derivations of निधि and सात्री in sloka (2).   • •
(c) Translate into English *either* of the above slokas.   6
(d) Discuss, in detail, the figures of speech (अलङ्कार) occurring   4
in slokas (1) and (2).

4. Explain, in Sanskrit, either A or B.   15

A.

सयव्ययायाःस्वथादिदोषं
व्यपेत्तयावेष्टितसाधुकाय्यः ।
कामात्तु पीड़ामधिकाञ्विदिच्छे-
 न्नबविप्रहं तव्भवा हि दोषाः ॥
प्रकालयुक्तस्यैन्यस्तु दन्यते क्षालयोधिना ।
कौश्विकेन इतस्योतिनिश्रीय इव वायसः ॥

B.

आत्मा वसं वा सुहृदो धनानि
तृषा भवन्तीह निमेषमात्रात् ।
मुहुर्मुहुसव्याकुलितानि तानि
तस्माम् विद्वानतिविग्रही स्यात् ॥
छिद्रं कर्म च वित्तज्ञ विज्ञानाति निजो रिपुः ।
वद्यन्तर्गीतम्धेव शुष्कवृत्तमिवानलः ॥

5. Translate *any three* of the following slokas into English :— 15

(1) सन्तप्यते प्रकृतिभिर्विरक्तप्रकृतिर्युधि ।
सुखाभियोग्यो भवति विषयेष्वप्रतिषक्तिमान् ॥

(2) अनेकचित्तमन्तस्तु द्वेष्यो भवति मन्त्रिणां ।
अनवस्थितचित्तत्वात् कार्यं तैः स उपेच्यते ॥

(3) नापराधं तु सप्रते प्रवृद्धो धनचारकः ।
नृपो यदा तदा लोकः सुभ्यते भिद्यते परैः ॥

(4) तद्वृद्धिर्नीतिनैपुण्यात् समाश्रीलनृपस्य च ।
जायतेऽतो यतेतैव यावद् बुद्धिबलोदयम् ॥

<center>SECOND HALF.</center>

Examiner—PANDIT SIVAKUMAR BHATTACHARYYA.

Answer Question 5 and either of the Groups (A and B).

<center>GROUP A.</center>

1. (1) तद् सुराग्नि भवति स्थिते पुरः

कः क्रतुं यजतु राजलचयम् ।
वद्वतो भवति कथ वा धुवः
श्रीवराष्टमपष्टाय योग्यतां ॥

(2) तस्य सांख्यपुरुषेण तुल्यता-
स्विषतः स्वयमकुर्वतः क्रियाः ।
कर्तृता तदुपलम्मतोऽभवत्
वृत्तिभाजि करण यथर्त्विजि ॥

(a) Explain sloka (1) after the manner of Mallináth. 5
(b) Explain the formation of the base of सुराग्नि and state the allusion in the second part of sloka (1). 1 + 2
(c) Translate sloka (2) into English. 5
(d) Expound the philosophical doctrine referred to in sloka (2). 2
(e) Give the different meanings of करण and account for the augment स in उपष्टम. 1 + 1

2. उत्थानवीरः पुरुषो वाग्वीरानधितिष्ठति ।
उत्थानवीरान् वाग्वीरा रसयन्त उपासते ॥
कुरुते पञ्चरणानि कालयुक्तानि यः सदा ।
भवत्यग्निरघातिभ्यो धृतुबभ्रवणोयमः ॥

(a) Refer to the context and explain the above slokas in Sanskrit.   4

(b) Translate the following slokas into English :—   4

ते मोहवश्मापन्ना मनुजा मनुजर्षभ ।
प्रतिपत्ति विमोहाच्च धर्मस्तेषामनीनशत् ॥
नष्टायां प्रतिपत्तौ च मोहवश्या नराक्षया ।
लोभस्य वश्मापन्नाः सर्वे भरतसत्तम ॥

GROUP B.

3. (1) ध्येयमेकमपथे स्थितन्त्रियः
स्त्व्यमुत्तममतीतवाक्पथम् ।
आमनन्ति यमुपाख्यमावरात्
पूर्ववर्तिनमतीव योगिनः ॥

(2) प्रेम तस्य न गुणेषु नाधिक
नृषु वेद गुणान्तरज्ञ यः ।
वित्तषया तदपि पार्यिवोऽर्घिन-
कुत्स्यगुण्य इति न व्यजीगणत् ॥

(a) Refer to the context and give, in Sanskrit, the full purport of sloka (1).   5

(b) Explain the formation of the base of स्थिते in sloka (1), and give its nominative singular form.   1 + 1

(c) Translate into English sloka (2).   5

(d) State and explain the *alankáras* in slokas (1) and 2).   3

(e) Derive प्रेम and चगुण in sloka (2).   2

4. सम्यक्प्रवायतो दण्डं भूमिपस्य विशाम्पते ।
युक्तस्य वा नाह्यधर्मो धर्म एव हि शाश्वतः ॥
कामकारेण दण्डं तु यः कुर्यादविचक्षणः ।
स इहाकीर्तिसंयुक्तो मृतो नरकमृच्छति ॥

(a) Refer to the context and explain in Sanskrit the above extracts.   4

(b) Translate into English :—   4

अशुभस्य यदा लब्धं द्वावंशावनुवर्त्तसे ।
कृष्णपक्षेव पृथिवी भवत्यर्द्धकला तथा ॥
दण्डनीतिं परित्यज्य यदा कार्त्स्न्येन भूमिपः ।
प्रजाः क्लिश्नात्ययोगेन प्रवर्त्तेत तदा कलिः ॥

5. Translate *any one* of the following extracts into Sanskrit :—   25

(a) The Lord, who in the early morning surveys with his all-seeing eye the whole of Jambudvipa, perceived what was happening in Anga land. At once he flew in the company of 500 disciples through the sky, and alighted in the courtyard of the merchant's house. All the inmates rejoiced to behold the master and his disciples. Attentively they listened to his preaching, and the whole family, along with many other people, became converts. After leaving Anuruddha in Anga to complete the work of conversion, the Buddha reverted to Srávastí.

(b) No particular gods are referred to except Brahmá who is seated in the lotus. Poor Rishis jostle in company with serpents. The splendour of the vision would be equalled if a thousand suns shone simultaneously in the sky In this transcendental blaze Arjuna sees innumerable arms, legs, mouths, bellies and eyes, and into the mouths warriors on either side, rushing and encountering death like moths rushing into burning fire. With strange forgetfulness Arjuna desires to see Krishna with the traditional crown and the other fixtures.

(c) Bhánuchandra continued to reside at Court. His pupil, Mahámahopádhyaya Siddhichandra, composed a commentary on the latter half of the Kádambarí of Bána. He had the reputation of being able to do 108 things at a time, and so secured from the then Emperor of Delhi the formal title of "Intelligent." From the colophon to the commentary on the Kádambhari by Siddhichandra we learn that his teacher, Bhánuchandra, had taught the Emperor of Delhi 1,000 names of the sun, and had obtained from the Emperor, in 1593, an order abolishing the tax on pilgrims to the holy hill of Śatrunjaya at Pálitána, and directing that all the sacred places should be made over to Híranijaya Súri.

SANSKRIT.

GROUP A.

SIXTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Examiner—PANDIT MURALIDHAR BANERJEE, M.A.

Answer, in English or in Sanskrit, TWO ONLY *of the five groups*

क, ख, ग, घ, च.

क ।

1.   कीदृशेषु दृश्यकाव्यभेदेषु वेणी-संहारः विक्रमोर्व्वशीयरूस-
भावः ? कतिविधास्तादृश-काव्य-भेदाः ? के च ते ?

2. प्रतिष्ठपुरमिति नगरं केनैव व्यपदेशेनाधुना परिचितम् ? केन वा पारा सिन्धुस्य ?

3. कोऽयं वेणी-संहार-कर्त्ता ? कदा वा स प्रादुरासीत् ? कथं वा तत् निर्बेतुं शक्यते ?

4. सङ्क्षेपतः समालोच्यतामिदं वेणी-संहार नाटकम् ।

5. साङ्कारनिर्देशं विग्रह्यन्तामधस्तनाः श्लोकाः ।

(A) "परे सन्निहघ एवाखिन् दुःखमास्ते युधिष्ठिरः ।
  वत्सस्य निश्चिते तत्त्वे प्राणयागार्ह्यं सुखी ॥"

कथं युधिष्ठिरस्य सदुःखमासनम् ? किमत्र "तत्त्वम् ?" कोऽय-"मर्घं"-पदेनोपचितः ? कथं वा तस्य सुखम् ?

(B) "तव पितरि पुरस्तादनुन्नतानां स्थितेऽखिन्
  स्थितिमति च विभक्ता ख्यतनाकम्पा-धेर्य ।
  अधिकतरमिदानीं राजते राज-लच्मीः
  स्थिमवति जलधौ च व्यस्ततोयेव गङ्गा ॥"

(C) "अपि चिन्तामविच्छिन्ता-परिश्रमसपेत्ते ।
  इदं द्वविन्तितं मन्ये कृतमाझ्यर्थमार्य्या ॥"

(D) "निसर्गेण सधर्मेख्य गोप्ता धर्मटुह्रो वयम् ।
  अर्थौ विरोधः भ्रक्तेन जातो नः प्रतियोगिना ॥"

ख ।

क्वासीत् खलु पुरूरवसो राजधानी ? कथं पुरूरवसः पुरतः मुच्छिताया उर्व्श्याः प्रथमोपनयनम् ? तत्र मुच्छिायैषौ किं कवसद्व्यम् ?

2. केचित् भवन्ति "The Second and Third Acts are to some extent encumbrances, the introduction of the queen, her jealousy and anger and subsequent repentance help very little, if they do at all, to develop the plot. These are a superfluous addition, which can be expunged from the drama without in the least spoiling the general effect."

इति विक्रमोर्व्श्यौ प्रति समालोचनकर्त्तुरूक्तिः श्रीमतां समौ-चीनतया प्रतिभाति न वा ? सकारखमुत्तरं लेख्यम् ।

3. समालोच्यतामु पुरूरवसञ्चरितम् ।

4.   शाकुन्तल-विक्रमोर्वंशी-नाटकयोः कतरत् कथं तावत् प्राग्-भाविल्वेन प्रतिभाति श्रीमतामू ?

5.   शालङ्कारनिर्देशं श्रयः प्रदर्श्य तामधस्तनानामू ।

   (A)   " धैर्यं निधेहि हृदये इत एष पापः
           किं वा कथाविदपि केनचिदन्वभावि ।
           सारङ्ग-संहृतिविधाविभ-कुम्म-कूट-
           कुट्टाक-पाणि-कुलिशस्य हरः प्रमादः ॥ "

   (B)   " प्रभापल्लविसेनाषौ करोति सखिना खगः ।
           अशोकस्तव केनेव दिङ्गुखश्रावतंषकमू ॥ "

   (C)   " ज्वलनः श्रोकजन्या मां अयं दहति दुःषहः ।
           समानायां विपत्तौ मे वरं संश्रयितुं रखे ॥ "

   (D)   " अक्लाभिरेव पान्थस्य प्रशस्त्वात् प्रियस्य नः ।
           अष्तरु-गुच्छे पुराणस्य पश्यावारस्य विप्लवमू ॥ "

ग ।

1.   सातृश्येन समालोच्यतां तावत् कालिदास-भवभूति-पादानां काव्यनिर्मांणनैपुण्यमू ।

2.   कीदृश्रि रघे विघये वा तयोः कविवर्यंयोः कौदृशं नैपुण्यमू ?

3.   वर्णितमाषीत् राम-चरितं तावत् कालिदासेन श्रीकष्ठेन च, समालोच्यतां सत् तौद्श-धौभिः श्रीमद्भिः ।

4.   केन रामायणमुपजीव्य दृश्यकाव्यं प्राक्तु प्रणीतमाषीत् ? कथं तद्वगम्यते ?

5.   शालङ्कारनिर्देशं तात्पर्यं विश्रद्रीक्रियताम्,—

   (A)   " विलांश्रुका मङ्कुल-मात्र-भूषणा
           पविश्रवुर्वांङ्कु र-लाञ्छितालका ।
           प्रतापदेश्रोज्भत गर्वंवृत्तिना
           मयि प्रसन्ना वपुषैव लच्छसे ॥ "

   (B)   " कर्णांलिङ्गनशायी वा पार्यंप्राण-हरोऽपि वा ।
           अनिवारित-सम्पातैरयमात्मास्त्रवारिभिः ॥ "

(C) "ग्रन्थोन्यमाहात्म्यविक्षोरन्योरविविक्तात्मनोः ।

विराजते विरोधोऽपि नाम हंसे तु का कथा ॥"

(D) "वह्निः सर्वांकारप्रवारमखीयं व्यवहरन्

पराभूच्च-स्थानान्यपि तनुसराणि ख्यापयति ।

जनं विद्वानेकः सफलमतिसम्बाय कपटैः

तठच्यः स्थानर्थान् घटयति च मौनं च भजते ॥"

घ ।

1. प्राक् वाल्मीकिना पद्यमयं प्रव्यमहाकाव्यं रामायणं विर-
चितम्, कालिदासेन पुनस्तेनैव महर्षिप्रदर्शितेन पथा प्रव्यलेन
रघुवंशं निर्मितं, परन्तु भवभूतिना तत् महर्षिमहाकविद्वुखं वक्त्-
परिवृत्य दृश्यतया रामचरितमुपनिबद्धम् । अत्र श्रीमद्भिः किं कारण-
मनुमीयते ? कथं तेन पद्येन नोपनिबद्धम् ?

2. खोदामिनी श्रीपर्वते निवसतीति श्रूयते । कतमस्मिन् प्रदेशे
प्रयं श्रीपर्वतः ? कथं वा तत्र तथायाः निवासः ?

3. मालतीमाधवस्य तृतीयेऽङ्के प्रशुशालातो व्याघ्रस्य विनिर्गमनं
कथमुपकल्पितम् ? किं वा जातमुपकृतं तेन नाटकीयवस्तुनः ?
तत्रुपादाने वा का गतिः ? कोऽयमखादर्शः ?

4. केयं मदयन्तिका ? कथं वा कविना व्याघ्रेणाक्रान्तत्वेन
वर्णिता ? कामन्दकी-निर्माणस्य किं बीजम् ?

5. प्रभवति निजस्य कन्यका-जनस्य महाराज इति भूरिवसोदक्तिः
बालकुमार-समर्थनं व्याख्यायतासु ।

6. एकमेव रामचरितमुपजीव्य कथं ग्रन्थद्वयं निर्मितं भव-
भूतिना ? कथं वा वर्णनायां समावभूयस्त्वमनूनीकृतं तेन ?

च ।

1. संस्कृतभाषायां दृश्यप्रव्ययोः किंविधं नाम काव्यमादौ
निर्मितमासीत् ? अत्र का श्रीमतां युक्तिः ? स्वीकृते च प्रव्यकाव्यस्य
प्रग्निसत्ते तेनैव च काव्यासोऽइभोग-सिद्धौ कथं पुनर्दृश्य-काव्य-
निर्माणायासः प्रर्वाचीनैः कविभिःप्रकीकृतः ?

2.   यथा मालविकाग्निमित्रे तथैव मालतीमाधवे बौद्धसन्न्या-
सिनीनां सष्टिंरुपलभ्यते । दृश्यते च बुद्धान्तेषु तासामतिप्रभावः ।
किमत्र बीजम् ? कथं वा वेदिकधर्मप्रधानेषु राज-संसारेषु* बौद्धानां
प्रसारः सम्भुज्यते ?

3.   समालोच्यतामौश्रीनरौचरितम् ।

4.   वीरौत्तरचरित-मालतीमाधवेषु नाटकेषु सयुक्तिकां कवे-
र्निर्म्माणपौर्वापर्य्यं तावदवधार्य्यताम् । निश्च्यताञ्च,—

"यद्वेदाध्ययनं तथोपनिषदां साङ्क्यस्य योगस्य च"—इति
श्लोकनिर्म्माणे कवेरभिप्रायः ।

5.   किं खलु "पङ्क्तिपावन"—लसतयम् ? यथा ज्ञान-
निधिगुँस" रित्यत्र कोऽयं ज्ञान-निधिः ?

6.   शाकुन्तले ग्रन्थकृत् पौरचितो—"कालिदास-प्रथितवस्तुनेति"
"कालिदास"-शब्द-मात्रेण कवेरुल्लेखः, भवभूतिना पुनर्वीरोत्तरचरित-
मालतीमाधवादिषु नानाविशेषणविज्ञापितस्तावदात्मपरिचयः प्रस्तः ।
किमत्र वक्तव्यं श्रीमताम् ? विचिन्त्य निश्चह्यताम् ।

SECOND HALF.

Examiner—PANDIT RAJENDRANATH VIDYABHUSHAN.

Full marks—50.

1.   What is the source of the story of the Mrichchakatika ? Was   8
there any work to serve as its model ? If so, how far is the author
of the Mrichchhakatika indebted to it for the plot and characters of
the play, and wherein is he original ?

2.   Express the purport of *any two* of the following extracts in   8
Sanskrit, indicating the context :—

(*a*) एतेन सापयति भिक्षिषु कर्म्मसाथीं

मेतेन मोचयति घूषण संप्रयोगान् ।

सद्घाटको भवति यन्त्रदृढे कपाटे

वघ्रस्य कीटभुजगैः परिवेष्टनं च ॥

(*b*) एतत्तद्भुतराष्ट्रचक्रसदृशं मेघान्धकारं नभो

दृष्टो गर्जति चातिदर्पितजलो दुर्य्योधनो वा शिखी ।

व्रततच्युतजितो युधिष्ठिर इवाच्छानं गतः कोकिलो

हंसाः संप्रति पाण्डवा इव वनाच्छातचर्य्यां गताः ॥

(c) शाशिख्योदकवाहिनी विगलिता याता स्वदेशं रति-
हीेशालंकृतप्रुघये सुवदने क्रीडारखोद्भाविनि ।
हा द्रोजन्नदि प्रहासपुलिने हा सावृशासाम्रये
हा हा नश्यति मन्मथस्य विपथिः सौभाग्यपख्यारः ॥

3. Turn the following into Sanskrit, clearing the context :— 4

म्रवि म्र पेक्ख पेक्ख ।

कक्कालुका गोच्छ डलित्त वेड्ठा
म्रावो म्र शुक्खे तलिरे हु संगे ।
भत्तं म्र पेमन्ति म्र लत्ति ग्रिट्ठे
सौखे म्र वेले या हु होद पूरी ॥

4. Give some examples from the above extracts of the changes 5
that conjoined consonants in Sanskrit words undergo when they are
turned into Prakrit words. Quote rules from Vararuchi according to
which these changes take place.

5. Translate into Sanskrit *any one* of the following extracts :— 25
(a) Then she, with the face of the full moon, saw the goddess of
famous beauty, Srî, on the top of Mount Himavat, reposing on a
lotus in the lotus lake, anointed with the water from the strong and
large trunks of the guardian elephants. She sat on a lofty throne.
Her firmly-placed feet were like the leaves of the lotus, and her fin-
gers and toes soft and excellent; her round and well-formed legs were
adorned with Kuruvindávarta, and her knees with dimples. Her
fleshy thighs resembled the proboscis of an excellent elephant, and
her lovely broad hips were encircled by a golden zone. Her large
and beautiful belly was adorned by a circular navel. Her waist,
which contained the three folds, could be encompassed with one hand.
On all parts of her body shone ornaments and trinkets, composed of
many jewels and precious stones, yellow and red gold. The united
beauties and charms of these ornaments were only subservient to
the loveliness of her face. Her lovely eyes were large and pure like
the waterlily.
(b) When in due time the god of the day had risen and by the
blows of his hands the darkness was driven away, while the inhabi-
ted world was, as it were, dipped in saffron by the morning sun, the
Kshatriya Siddhártha rose from his bed, descended from footstool,
went to the hall for gymnastic exercises, and entered it. There he
applied himself to many wholesome exercises, jumped, wrestled,
fenced, and fought till he got thoroughly tired : then he was anoint-
ed with hundredfold and thousandfold refined different kinds of oil,
which nourished, beautified, invigorated, exhilarated, strengthened,
and increased all senses and limbs. On an oiled hide he was sham-
pooed by clever men with soft and tender palms of the hands and
soles of the feet, who were well acquainted with the best qualities of
the practices of anointing, kneading, and stretching; well trained
skilful, excellent, expert, intelligent and never tiring. When by this
fourfold agreeable treatment of the body the king's bones, flesh, skin,
and hair had been benefited, and his fatigues banished, he left the
hall for gymnastic exercises, and entered the bathing house.

SANSKRIT.

GROUP A.

SEVENTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—PANDIT ASUTOSH SASTRI, M.A.

1 (क) सा रघवत्ता विहता नवका विलसन्ति चरति नो कां कः ।   17
घरघीव कौर्त्तिशेषं गतवति भुवि विक्रमादित्ये ॥

(ख) पितृकार्य्ये तृघोत्सर्गः प्रग्निनः कन्यातुलारोहणं योषे
मुखव्याघातचिन्ता हानच्छेदः करिकपोलेषु दक्षिणवामकरणं दिङ्निभये
प्ररमेको दधिषु ।

(ग) निश्रङ्कु रिव न ज्ञश्वपयस्खलितः प्रङ्कुरोऽपि न विषादौ
पात्रकोऽपि क कृष्णवत्माप्रयाश्रोऽपि न दहनो नान्तक इवाक्षाइप-
हृतजीवनो न राहुरिव मित्रमण्डलग्रहणवर्द्धितरुचिः ।

(घ) पुरखवा ब्राह्मणधनतृष्णाया विननाश । नहुषः परकलत्र-
दोहृदौ मष्टाभुजङ्ग प्राप्तीत् । यथातिर्विंहितब्राह्मणौपाधिप्रहृणः
पपात । सुद्युम्नः स्त्रीमय इवाभवत् ।

(a) Refer to the context and explain in Sanskrit *any two* of extracts (क), (ख) and (ग).

(b) Narrate very briefly the stories alluded to in (घ).

(c) Explain the Rhetorical Figures in (क), (ख) and (ग) of the above extracts.

2. Translate, into English, *any two* of the following extracts,   17
writing short comments on such words in (1) as suggests *double entendre* :—

(1) राघवः परिचरन्नपि जनकभुवं जनकभुवा वहु वनं विवेश ।
भरतो रामे दर्श्यतभक्तिरपि राम्ये विरासमकरोत् । नलश्च दमयन्त्या
मिलितश्वापि पुनर्भूपरिग्रही जातः ।

(2) व्यापच्चारमिव फेनैः यसुरामोद इव वेलावकुलगर्ब्भैः
व्वरोषमिव गर्जितैः सखेदमिव निःस्वसितैः यभ्रूकुटीभङ्गमिव तरङ्गैः
व्याज्ञानच्चलमिव रामसेतुना ... ... जलनिधिमपश्यत् ।

(3) विरहिण्या हृदयं विदारयितुं कारपत्रमिव कुसुमायुधस्य
क्रकचव्व्लवमश्रोभत । अलरदाहि स्रोललदिङ्गलताकरपत्रकारिते
पवनवेगनिर्धूताम्बूर्ष्ठचया इव जव्लरेश्वरो बभुः ।

(a) Show, by quotation or reference, that the similes in the
underlined parts of the above extracts are also found in the works of
poets one of whom preceded, and others followed, Subandhu.

Answer ONLY ONE of the following questions. 16

3. Give, in your own words (in Sanskrit), the bare outline of the
story of Subandhu's Vasavadatta, with a critical estimate (in English)
of its action, style and other remarkable characteristics.

4. Write a short thesis in English on the following remarks :—

" कवीनामगलद्गर्पं नूनं वासवदत्तया ।"

and

" सुबन्धुर्वाणभट्टश्च कविराज इति त्रयः ।
वक्रोक्तिमार्गनिपुणाश्चतुर्थो विद्यते न वा ॥"

5 Mention some plays and poems of which वासवदत्ता is either the
name of the heroine or a principal character. In what points can
the story of a play of poet Bhása and that of Subandhu's Vásava-
dattá be compared ? Is there any reason for presuming that Suban-
dhu borrowed some of his ideas from Bhása ?

SECOND HALF.

Examiner—PÁNDIT BHAGABATKUMAR SHASTRI, M.A.

1. Translate into English :— 25

तथ्य च शिखरिणः स्वभावरमणीयेषु सम्भूतःस्तवकिततिलक-
चम्पकाश्रोकवकुलेषु कलहायमानमत्तपिककुलालापवाचालविकचचूत-
मालेषु परिवलमिलितमधुकरीनिकरास्वकारितकोरकित सरसषड्कारेषु
रत्नविल समुद्रगैवलप्रबालअटिखलराजताल्लौमूलजटाजालकेषु घटित-
येतुवानरविकीर्णगिरिकूटकुटिलितान्तरालमार्गाधिवतस्तलः सखीखेद-
पूराकृष्टमनचा त्रिजटया विनोदितदयितविरहखामर्षिथिलीकृतनेत्रः
क्रीडानिलिसमागतया प्रधानसत्त्वचरीभिः सह पार्श्वरेण विचरण्या

लतामन्दिरेषु मन्दोदैर्य्या षविंचमार्षचितविकचमन्दारेषु षेतुषिखरोद्-
षजलवज्ञतघतलाषौनकिन्नरमिथुनगीयमानगामवद्चरितानुतेषु प्रझा-
न्तनक्ष्ज्वरोपद्रवतथा षज्वरन्निरचर्चकितेः समौपाझमनिवाषिभिस्ताप-
षकुमारकैः प्रकटितविभौषणषौराव्येषु ... ... ज्ञानकोवेमुख्यांःखत्ताम-
त्यकाछातिवाद्धितोल्कछेषु तटवलेषु ... निर्भरेषु ... दशकण्टक्क्रेद-
निर्व्तेन द्यरथात्मजेन ख्रघा जटायुषे निर्व्तितः प्रथमो निवा-
पाञ्जलिः ।

. 2.   Annotate in English any *five* of the following:—   15

(*a*) मुखडोपढाराढरणोद्यातद्विड्प्राथ्यमानामद्वैकम् ।

(*b*) तुषारपरिकरितकरकञ्चिशिरीक्रियमाणोद्षिवन्ति ।

(*c*) .अढ्भाषियत्तक्कालाय षकुम्भवर्ष्मणि भानुमष्डले‧भयत्कुर-
कव्थकायव्याज्ञेन कोऽपि पार्धिवप्राञ्जिताथौं पुष्घोपढारमिवोपज्ञहार ।

(*d*) भूभ्ह्लानुगर्भकुम्भधारिषु   विविघघरःषरित्तौयौभिमुखेषु
प्रच्छियसेषु वमकरिकुलेषु ।

(*e*) वड्बृतपटावगुण्ठनां रञ्झितरङ्गं जनक्रमानामिव वंश्यवाह्या
मनाय्यौं प्रियं व्यक्तुमभिलघर्ात मे मनः ।

(*f*) गौंड़ाधिपमपढ़ाय   कख्तादृशं   मष्टापुरुषं ... मुक्तप्रख्तं
कलष्ययोनिनिव कृष्णवर्त्मप्रसूतिः ईदृशेन षर्व्तलोकविगर्षितेन कृष्णना
ध्रमयेशाय्यम् ?

(*g*) तेजस्विनः षकलाननवाप पयोराशिषह्तस्य कुतो निवृत्ति
रुदमणः ?

Attempt any ONE *of the following three questions.*

3.   Fully trace the course of events that led to the succession of   10
Harsha on the throne of his father.

4.   Sum up in your own words in Sanskrit the conversation be-   10
tween Harsha and his general on the eve of the great expedition.

5.   Fully describe in English the remedies, both human and super-   10
human, which were adopted to avert the calamity of Prabhakara
Vardhana's death.

———

SANSKRIT.

GROUP A

EIGHTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—MAHAMAHOPADHYAYA PRAMATHANATH TAR-KABHUSHAN.

1. शब्दार्थरसदोषेषु यं काव्यप्रकाशकृता प्रदर्शिताः सरस्वती- 15
कण्ठाभरणकृता न प्रदर्शिताः, ये च सरस्वतीकण्ठाभरणकृता प्रदर्शिता
न प्रदर्शिताः काव्यप्रकाशकृता ते सर्वे सोदाहरणोपन्यासं नामतो
निर्दृश्याः ।

अथवा—

काव्यस्वरूपनिर्णये साहित्यदर्पणकृता काव्यप्रकाशकृत् प्रदर्शित-
काव्यलक्षणं याभिर्युक्तिभिः खण्डितं ताः साकल्येन प्रतिपाद्यन्तामू,
साहित्यदर्पणकृत्सञ्चुद्भाविताः काव्यप्रकाशोक्तकाव्यलक्षणखण्डनपरा
युक्तयः सर्वथा समीचीना न वा ? समीचीनत्वपक्षे न किञ्चिद्वक्तव्यं
अषमीचीनत्वे तु कारणं प्रतिपाद्नीयमू ।

2. भोजराजमते श्राद्ध्यमेव रसत्वं न वीराद्भुतादीनामिति 5
एकावलीकारेणोक्तं तत्र वीरादीनामरसत्वे श्राद्ध्य तु रसत्वे अनुकूला
युक्तिः कीदृश्री भवेत् ।

अथवा—

सङ्केतितत्वानुमेयो जात्यादिर्जातिरेव वा इति कारिकार्द्ध-
व्याख्यानावसरे सर्वेषां शब्दानां जातिरेव प्रवृत्तिनिमित्तमितिमतं
काव्यप्रकाशकारेण यथा समर्थितं तथा प्रतिपाद्यतामू ।

3. का नाम शाब्दी व्यञ्जना का वा श्रार्थी अनयोरुदाहरणे 10
प दर्शनीये ।

35

अथवा—

प्रकृत्येकदेशस्य रसव्यञ्जकत्वं उदाहरणोपन्यासेन प्रतिपादनीयं

4.　　शब्दवृत्त्याभिधेयांश्च प्रत्यक्षेणान पश्यति ।
　　　श्रोतुश्च प्रतिपन्नश्चमनुमानेन चेष्टया ॥
　　　अन्यथानुपपत्त्या तु बोधेच्छक्तिं द्वयात्मिकाम् ।
　　　अर्थापत्तावबोधेन सम्बन्धं त्रिप्रमाणकम् ॥

10

इति श्लोकद्वयं प्रकृतषड्वृत्तिप्रदर्शनपुरस्सरं काव्यप्रकाशकृदुक्तदिशा
व्याख्येयम् ।

अथवा—

"स च न कार्यः, त्रिभावादिविनाशेऽपि तस्य सम्भवप्रसङ्गात्,
नापि ज्ञाप्यः, सिद्धस्य तथात्वासम्भवात्, अपि विभावादिभिर्व्य-
ञ्जितस्स्वर्वणीयः"। इति सन्दर्भः प्रकृतषड्वृत्तिप्रदर्शनेन वैशद्येन
व्याख्यातम् ।

5.　　कल्याणानां त्वमसि महसां भाजनं विश्वमूर्ति

10

　　・धुर्यां लक्ष्मीमय मयि भृशं धेहि देव प्रसीद ।
　　　यद्द्वयत् पापं प्रतिजहि जगन्नाथ नश्च तन्मे
　　　भद्रं भद्रं वितर भगवन् भूयसे मङ्गलाय । इति

अस्मिन् श्लोके यत्पदद्वयं वर्त्तते, तत्पवन्तु एकमेव इति एकस्य
यत्पदस्य साकाङ्क्षत्वेन कश्चिद्दोषः अस्ति न वा अस्ति चेत् किं तस्य
नाम? नास्ति चेत् कथं इति स्फुटीकरणीयम् ।

अथवा—

खड्गं रागावृताङ्गया सुहृढमसि यथैवासिधयुगरिकक्षे
मातङ्गानामपीच्छोपरिपरपुरधैर्यां च दृढ्ढापतन्त्यौ ।
तत्सृक्तोऽयं न किञ्चिद्वु गणयति विदितं तेऽस्तु सेनास्ति वक्ता
भूत्येभ्यः श्रीनियोगाद्वु गदितुमिति गसे वाम्बुधिं यस्य कीर्त्तिः ।

इति अत्र श्लोके कस्मिन्नंशे को दोषः कथं वर्त्तते इति वैशद्येन
निरूपणीयम् ।

SECOND HALF.

Examiner—RAI RAJENDRACHANDRA SASTRI, BAHADUR, M.A.

Answer any THREE *of the first four questions, and also Questions* 5 *and* 6.

1. Fully discuss as to whether all kinds of **क्षेष** are to be regarded 6 as **अर्थालङ्कार** and whether a **क्षेष** is a bar (**वाधक**) to other figures of speech. Give the views of Mammata, Vidyadhar and Visvanath on the subject.

2. Define **क्षेष** and differentiate it from **समासोक्ति तुल्ययोगिता** and 6 **वक्रध्वनि**.

Or,

Define **काव्यलिङ्ग** and differentiate it from **अर्थान्तरन्यास अनुमान** and **दृष्टान्त ।**

3. Explain and illustrate :— 6

$$ \text{" यत्रोपमानशब्दानां गोणवृत्तिव्यपाश्रयात् ।} $$
$$ \text{उपमेये भवेद्वृत्ति स्तदा तद्रूपकं विदुः ॥"} $$

Or,

Explain and illustrate some of the figures of speech which involve *either* **आरोप** *or* **विरोध**.

4. Mention the faults which vitiate a **रस** and state whether there is any in the following :—

चितो दृक्तावलग्नः प्रसभमभिहृतो ज्याकृदानोंऽङ्कान्तम्
सह्नन् केशेष्वपास्तस्रगुणनिपतितो नेत्तितः सम्मुखेण ।
आलिङ्गन् यो ऽवधूतस्त्रिपुरयुवतिभिः साश्रुनेत्रोत्पलाभिः
कामौवाद्रौपराधः स दहतु दुरितं शाम्भवो वः शरार्गिः ॥

5. State the figures of speech in the following, giving short reasons 7 for your answer :—

(i) आरत्नालोकसन्धार्यमवाप्य सूर्यरश्मिभिः ।
वृष्टिरोधकरं पुंसां यौवनप्रभवं तमः ।

(ii) न मालतीदामविमर्दंयोग्यं न प्रेम नव्यं वहसे ऽपराधान् ।
स्नानाऽपि न स्नायति केसरत्वग् देवौ न खण्डप्रणया
कर्णाञ्चत् ॥

(iii) द्वीपेषु कर्पूरपरागपाण्डुष्वाषाद्य लौलापरिवर्तनानि ।
आन्या तुषारादितटे लुठन्तः श्रीखेन खिन्ना स्तुरगाःक्षौयाः ॥

(iv) नालस्य प्रसरो जलेऽत्रपि कृताावासस्य कोशे रुचिः
दस्छे कर्कश्रता सुखे च मृदुता मित्रे महत्तां प्रश्रयः ।
स्राम्मूलं गुणसंग्रहव्यसनिता द्वेष्य दोषाकरे
यस्येषा स्थितिगम्ब्जस्य वसतिर्युक्तेव तत्र प्रियः ॥

6. Translate into English :—   25

(i) कुन्तलेश्वरभवत्कृपावशात् तत्र राज्यमपि शातुसुतःशुकः ।
कः प्रसन्नमनसां यशोऽर्यिनां श्रीसमर्पणविधौ परिश्रमः ॥

(ii) प्राविशोत् कति न सान्त्वनक्रमांस्तत् समीप मनिश्रं विश्रां
पतिः ।

एकमप्यनयवायुलञ्जितो नाग्रहीत् कुलकछकस्तु सः ॥

(iii) वैश्रसस्य कथमस्य, शान्तिरिव्येष यावदनुकम्पया स्थितः ।
तावदन्नतभुजावलेपतः कृष्णावेणितटमाजगाम सः ।

(iv) भूपमेनमपहाय तच्चमूमाश्रिताः कति न मण्डलेश्वरः ।
जायते मतिविपर्य्ययो नृणां प्रायशः परिभवे भविष्यति ॥

(v) वीच्या स द्विपघटाः कटस्थली निलुठद्धृल दान निर्भराः ।
वाजिनश्च चतुलानमन्त ज्येष्ठयोघन बिधावकुण्ठतां ।

SANSKRIT.

GROUP B.

FIFTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

*Examiner—*PANDIT N. S. ANANTAKRISHNA SASTRI.

Answer THREE *questions, of which No. 5 must be one.*

1. (a) पदान्तरसमभिव्याहृतानि पदानि निरुक्तस्य विषयाः ? उत   10
केवलानि । तत्रापि लौकिकानि वैदिकानि वेति विवृण्यतां ।

(b) निरुक्तमिति पदं ग्रन्यपरं कथमिति निरुच्यतां ।   6

2. (a) मन्त्रार्थवत्त्वे निरुक्ताभिमतं व्यवाधारणं कारणं निर्दिश्य 10
तन्निरूपणस्य कः प्रसङ्ग इति निरूप्यताम् ।

(b) मीमांसाशास्त्रेण निरुक्तस्य कियानुपकारः ? 6

3. (a) नाम्नामाख्यातजत्वनियमतदनियमप्रत्ययोरुपपत्तीर्विलिख्य 12
पक्षद्वयेऽपि प्रयोजनमेतौ निरूप्यताम् ।

(b) निरुक्तानुसारिणो लौकिकप्रयोगस्य साधुत्वासाधुत्वे विचार्य 4
निर्णीयताम् ।

4. (a) निरुक्तं व्याकरणैकदेशो वा पृथगेव विद्यास्थानं वेति सोप- 8
पत्तिकं विचार्यताम् ।

(b) उपमालक्षणां निरुक्तोक्तं निरूप्य तदर्थो निपाता अन्ये च 8
षोडाहरणं त्रयः संग्रह्यन्ताम् ।

5. (a) देवतलक्षणं देवतमन्त्रभेदान् तेषामुदाहरणानि स्तुतिमन्त्राणां 8
आशीर्मन्त्राणां च तात्पर्यं च निरूपयन्तु ।

(b) अधोर्ऽालिखितानां पदानां निर्वचनमुपपाद्यार्थो वर्ण्यताम् । 10
गौः व्योम, सुनृतावरी हरस्वतः एतश्च शृङ्गाणि. स्वाहा
हुड्डुभिः ।

<div align="center">SECOND HALF.</div>

<div align="center">*Examiner*—PANDIT SITARAM SASTRI.</div>

1. अधस्तनानां त्रयाणामन्यतमं द्वितयं व्याख्येयम् ? 10

(१) क्रन्दोव्याकरणादिभिः प्रातिशाख्यस्थानाणासिद्धिर्भवति न
वा ? न चेत् कुतः ? प्रदर्श्य च प्रातिशाख्यपदस्यार्थव्युत्पत्तौ ।

(२) उदात्तादिपरस्वरशब्दस्य व्युत्पत्तिः कीदृशो ? कश्च तदर्थः ?
कतिविधश्चेति षोडाहरणं प्रदर्शनीयम् ।

(३) क्रमस्य स्वरूपं प्रयोजनं च प्रदर्श्य म् ।

'नगं च श्रंसं दैव्यं च ध्रुपरिं', 'ग्राविध्यदिलीनिश्रस्य दल्हा',
'परीलोर्पिज्वता मुतम्' इत्येतेषु पदविभागप्रदर्शनपुरस्सरा क्रमप्रवृत्तिः,
तद्धेतवश्च सन्दर्शनीयाः ।

2. प्रश्लिष्टोद्वाप्रपदवृत्तीनामुदाहरणानि प्रदर्श्य अम्बूकृतशून- 10
निरस्तप्रस्तानां स्वरूपाणि विवरणीयानि ।

लकारहकारयोश्च के दोषाः सम्भवन्ति, वार्यं चेति विशदं विलेखनीयम् ?

नूइत्या, वौरैः ख्याम, अपि धाँव निघीष्ठ, अजनिष्ट हिषः, तंगू धंया स्वगरे ।

एषु के सन्धयः कैः सूत्रैः प्रवर्तन्ते ?

3. कखयोरन्तरस्य व्याख्यानं कार्यम् ।

(क) प्रातिशाख्योक्ताध्ययनप्रकारः संक्षेपेण विलेखनीयः ?   10

प्रश्नः कः ? सूक्ते प्रश्नातिरिक्तेकहूराद्यावशेषे तत्र का प्रति-पत्तिः ?

'एका च सूक्तम्' इत्युच्यते का सा एककृ ?
स्थानप्रयत्नयोः साम्येऽपि वर्णावभासमानो विशेषः किं कृतः ?
वर्णविशेषत्वकारका चेतवः के कति चेति प्रदर्श्यम् ।

(ख) 'जात्यवद्दा तथा वाऽन्तौ तनू अचौति पूर्वयोः' ।
'तस्योत्तरतोऽत्तादद्धं माऽाऽद्धं एव वा' ॥

सूत्रद्वितयं सनिदर्शनं सम्यग्व्याख्येयम् ।
उत्तरस्मिन्नेव वा शब्दयोः स्वारस्यमपि प्रदर्श्यम् ।
उत्तरसू विषये मतभेदस्त्तोऽपि प्रदर्शनीयः ।
स्वरितात्तरेषामनुदात्तानां विषये को मतभेदः ?

4. छन्दसां प्रयोजने प्राच्यनव्ययोः को मतविमेदः ?   10

छन्दः पश्चुलाऽननमपि विभिन्नमतप्रदर्शनपूर्वं करणीयम् ।
विवेचनीये च युक्तायुक्त्वे उभयत्र ।

यथेरावश्यकत्वं संसाध्य, तस्य दुष्टत्वस्थलानि द्विन्राष्ट्दाचार्याणि ।

पूर्वान्तवत्स्वरसस्यौ क्वचिदेव पराहिवत् ।
द्रष्ट्व्यो यतिचिन्तायां यथादेशः पराहिवत् ॥

अ ाख्येयघा कारिका उशाहरणप्रश्नपुरस्सरम् ।
सामगायत्रीप्राजापत्योष्णिगासुरवृहतीनां परस्परविमेदं संप्रदर्श्य, गायत्रादिच्छन्दसांमाष्योदिनामविषयोऽभिप्रायः स्फुट-मुपपाद्यः ।

5. (१) प्रस्तारादिप्रत्ययानामुपयोगं प्रतिपाद्य पिङ्गलाचार्यमतेन 10
त्र्यक्षरः प्रस्तारः प्रस्तार्यौ लक्षणसमन्वयनपूर्वम् ।

पञ्चाक्षरे प्रस्तारे ऽ । । ऽ ऽ इदं वृत्तं कतिषम् ?

(२) 'विपुलायुग्लः सप्तमः 'पथ्या पूर्वग्रेत्तृतीयः' 'चरो वृहतौ
याक्षय' 'विपरीतप्रतिष्ठा' ।

व्याख्येयानि सूत्राख्येतानि ।

नागी, त्राप्तापङ्क्तिः, पुटः, इन्द्रवज्रा, दण्डकः एतेषां
लक्षणानि प्रदर्श्य समन्वेयानि ।

(३) पिङ्गलाचार्यैऽयं मनुष्यो वा त्राख्यायिकाऽनुरोधेन सर्पो
वा ? यद्ययं मनुष्य त्राख्यायिकायाः कोपपत्तिः ? 'सजयति पिङ्गल-
नागः' इति नागोक्तिः कथं चोपपद्येत ? सर्पश्वेच्छन्दोग्रन्थविरचयि-
तृताया उपपत्तिर्वाऽच्या ।

एतेषु त्रिषु त्रन्यतमं द्वितयं व्याख्येयम् ।

SANSKRIT.

GROUP B.

SIXTH PAPER.

Candidates are required to give their answers in their own words
as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

*Examiner—*MAHAMAHOPADHYAYA LAKSHMAN SHASTRI.

Answer any THREE *questions, of which No. 5 must be one.*

1. (a) चतुःसंख्यो ज्योतिष्टोमः 15

गवामयनम्

त्रादित्यानामयनम्

त्रङ्गिरसामयनम्

द्वादशाहः

एतेषां स्वरूपं निरूप्यताम् ।

(b) कीदृशीयातिश्नेष्टरोः स्वरूपं निरूप्यताम् ।

2. (a) अनुवषट्कारः अनुव्याहारः अन्तर्यामिग्रहः अपोनप्त्रीयाः 15
अम्तोर्यामः आगूःकरणम् उपवसथः निर्वापः निष्कासः प्रयाजाः सुया
एतेषामर्थाः प्रदर्श्यन्ताम् ।

(b) प्रथमपञ्जिकार्थः सङ्क्षेपेण प्रदर्श्यताम् । सोमो वै राजा
गन्धर्वेष्वासीत्तं देवाश्च ऋषयश्चाभ्यध्यायन् ।

3. (a) क्रयमयसम्मान् सोमो राजा गच्छतीति का वागब्रवीत 15
स्वीकामा वै गन्धर्वो मयैव स्थिग्रा भूतया पणध्वर्मति नेति देवा
अब्रुवन् कथं वयं खदृते स्यामेति साऽब्रवीत् क्रौणीतैव यर्हि वाव
वो मयायो भविता तद्यैव वांऽहं पुनःगान्ताऽस्मीति तर्घति तया
मह्नग्राभूतया सोमं राजानमक्रीणंस्तामनुक्रतमस्तनुं वस्तरौ-
माजन्ति सोमक्रयणीं तया सोमं राजानं क्रीणन्ति तां पुनर्निष्क्रीणीयात्
पुनर्हि षा ता नागन्छत्तस्मादुपांशु वाचा चरितव्यं सोमे राजनि क्रीते
गन्धर्वेषु हि तर्हि वाग् भवति साऽग्रऽएव प्रणीयमाने पुनरागच्छति ।
व्याख्यायतां षोपष्टम्भम् ।

(b) मनोतामन्तश्च वायव्ये कुहो ऽस्ति न वा प्रतिपाद्यताम् ।

(c) क्रत्वः पशुहविस्रत प्रत्यङ्ग् द्विविभेदः ? प्रतिपाद्यताम् ।

4. (a) प्रउगशस्त्रस्य स्वरूपं किम् ? 15

(b) यच्चायज्ञीयसाम्नः कुत्र विनियोगः ?

(c) अजस्य पशोः प्राशस्त्यं कीदृशं श्रुत्या दर्शितम् ?

5. (a) ग्रहमेघ शब्द्योर्निर्वचनं कीदृशं श्रुत्या दर्शितम् ? 20

(b) आप्यन्ते वै स्तोमा आप्यन्ते छन्दांसि तृतीये ऽहन्नेतदेव तस
उच्छिष्यते वागिव्येव तदेतस्त्तरं वग्रत्तरं वागिव्येकमस्तरमस्तरमिति
वग्रत्तरं ष एवेष उत्तरस्याह्नो वागेकं गौरेकं द्योरेकं ततो वै वागेव
चतुर्थमष्ठर्वर्हति तद्यच्चतुर्थमष्टन्नूह्र्यन्ग्ये तदेव तदुत्तरमभ्यायच्छन्ग्ये-
तद्द्वयग्येतत्पृत्रिभावयिष्यन्ति चतुषस्याह उद्याय्ये । व्याख्यायतां
षोपष्टम्भम् ।

Examiner—PASUPATINATH SHASTRI, M.A.

Any TWO *of the first three questions, and any* ONE *of the next two,
are to be answered.*

1. (a) किं नाम धूरोऽवस्तुम् ? 13

(b) को वा प्रशास्ता ? को वा होतृका ?

(c) संपातसूक्तानीति व्यपदेश्यः कुतः ? अस्मिन् विषये या आख्यायिका वर्त्तते सा विलिख्यताम् ।

2. (a) भार्य्यामरणादूर्ध्वम् आश्रितामग्निग्रिह्वे त्रमनुतिष्ठेन्न वा इति विचार्य्यताम् ।   13

(b) को नाम फलचमसः ? कथं वास्य उन्नयनं भवति ?

(c) पश्रोः   उपाकरण-नियोजन-पर्य्यग्निकरणानि   संचेपेण वर्ण्यन्ताम् ।

3. (a) का नाम दिगपराजिता इत्युच्यते ? कथमस्था एतन्नाम सम्पन्नम् ?   13

(b) ब्रह्मणः परिमर इत्यनेन भवता किं बुध्यते ?

(c) राजसूये अभिषेकप्रकारो वर्ण्यताम् । ..

4. Translate the following into classical Sanskrit :—   24

   (a) तद्विष्णोः परमं पदं सदा पश्यन्ति सूरयः ।
       दिवीव चत्तुरातसम् ॥

   (b) स नः पितेव सूनवे अग्ने सूपायनो भव ।
       सचस्वा नः स्वस्तये ॥

   (c) आजिघ्र कलशं मह्युरुधारा पयस्वता त्वा विश्वम इन्दव समुद्रमिव सिन्धवः सा मा सहच्च आभज प्रजया पशुभिः सह पुनर्मो विश्रताद्रयिः ।

   (d) आहं रोत्तामरुह्म ऋतस्य पत्तौ
       गायत्रेण छन्दसा ब्रह्मणा वर्तं
       सत्येऽधां सत्यसृते धाम् ।

   (e) पूर्णान् ग्रहान् रह्णीयादामयाविनः, प्राणान् वा एतस्य ग्रह्यति यस्य आमयति, प्राणा ग्रह्याः प्राणानेवास्य सुचो सुञ्जति उन यस्तीताहुर्भवति जीवत्येव ॥

5. Translate the following into classical Sanskrit :—   24

   (a) अपसु मे सोमो अब्रवीदन्तर्विश्वानि भेषजा ।
       अग्निं च विश्वशम्भुव मापश्च विश्वभेषजौः ॥

   (b) श्रेष्ठं यविष्ठ मतिर्गियं स्वाहुतं जुहुं जनाय दाशुषे ।
       देवाँ अछ्छा यातवे जातवेदसमग्निमीडे व्युष्टिषु ॥

(c) आप्यायस्व मदिन्तम सोम विश्वेभिरं शुभिः ।

भवा नः सुप्रवस्तमः सखा वृधे ॥

(d) इन्द्रो वै सवृड् देवताभि रासीत् स न व्यावृतम् अगच्छत् स प्रजापतिमुपाधावत् तस्मा एतं पञ्चदशरात्रं प्रायच्छत् समाचरत् तेनायजत ततो वै सोऽन्याभिर्देवताभिर्व्यावृतमगच्छत् स एवं विद्वांसः पञ्चदशरात्रमासते व्यावृतमेव पाप्मना आवृत्य प्रच्छन्ति ।

(e) समुद्रं वा एते प्रप्लवन्ते ये संवत्सरमुपयन्ति यो वै समुद्रस्य पारं न पश्यति न वै स ततः उदेति संवत्सरो वै समुद्रः तस्य एतत् पारं यदतिरात्रो य एवं विद्वांसः संवत्सर मुपयन्ति अनर्तो एव उदृचं गच्छन्ति ।

SANSKRIT.

GROUP B.

SEVENTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

Full marks—75.

(The questions are of equal value).

FIRST HALF.

Examiner—BABU KOKILESWAR BHATTACHARYYA, M.A.

1. Answer *either* (a) or (b) :—

(a) Give the substance in your own words of the "Dreaming state" (सुप्न-स्थान) of the Individual Self as described in the Brihadáranyaka Upanishad, and discuss the theory.

(a) अन्धं तमः प्रविशन्ति येऽविद्यामुपासते ।

ततो भूय इव ते तमो य उ विद्यायां रताः ॥

Explain this sloka after the manner of Sankara and write full explanatory notes on the terms अविद्या and विद्या as used here.

2. Explain the relation between कर्म, उपासना and ब्रह्मविद्या । What place does Sankara assign to कर्म, उपासना in the scheme of ब्रह्मज्ञान ?

3. Write what you know about **हूष** and **चक्रवर्मी** as given in your text.

Explain :—

जाग्रद्दष्टिषया अपि मानसप्रत्ययाभिनिर्वृत्ता एव । सदीदाभि-
निर्वृत्ततेजोबन्नमयत्वात् जाग्रद्दष्टिषयाणाम् । संकल्पमूला हि लोका
इति च उक्तम् । तस्मान्पानसानां वाद्यानां च विषयाणां इतरेतर-
काय्यकारणत्वमिष्यत एव वीजाङ्कुरवत् ।

4. Explain the theory of **सत्कार्य्यवाद** । How does Sankara refute the view of **तार्किक** that the effects (**कार्य्य**) are non-existent in their cause (**कारण**) ?

5. Fully explain *either* of the two :—

(*a*) तथा सांख्याः द्रष्टारं देहादिव्यतिरिक्तं अवगम्यापि त्यक्तागम-
प्रमाणत्वात् स्वगुविषये एव ग्रन्थदर्शने तथ्यैः । तथा काणादा
नवभिरात्मगुणैर्युक्तमात्मद्रव्यं विशेषयितुं प्रवृत्ताः ।

(*b*) स न आकाशः नामरूपयोः स्वात्मस्थयोः जगद्बीजभूतयोः
षलिलस्येव फेनस्यानीययोः निर्वोढा व्याकर्त्ता । ते नामरूपे यस्य ब्रह्मणे
अन्तग मध्ये वर्त्तेते, यन्नामरूपाभ्यामस्पृष्टं तद्ब्रह्म नामरूपविलक्षणं...
तथापि तयोर्निर्वोढृ ।

SECOND HALF.

Examiner—VEDANTABISARAD N. S. ANANTAKRISHNA SASTRI.

1. Translate into English *one* of the following extracts :—   10

(*a*) न तथा ब्रह्माभिः कदाचित् क्वचिदपि सतोनदभि-
धानमभिधेयं वा वस्तु परिकल्प्यते । सदेव तु सर्वंमभिधानमभिधीयते
च यत्न्यबुद्ध्या । यथा रज्जुरेव सर्पबुद्ध्या सर्प इत्यभिधीयते, यथा वा
पिण्डघटादिश्वरोऽन्यबुद्ध्या । पिण्डघटादिश्वब्देन अभिधीयते लोके ।
रज्जुविवेकदर्शिनां तु सर्पाभिधानबुद्ध्यौ निवर्त्तते, यथा च सद्द्विवेक-
दर्शिनां घटादिश्वब्दबुद्ध्यौ, तद्वत् सद्द्विवेकदर्शिनामनयविकारश्वब्दबुद्ध्यौ
निवर्त्तते ।

(*b*) स गन्धर्वो वायुमेव—क्रियाश्वक्तिप्रधानं सूत्रमेव—प्रश्वंस ।
अथैव अखिन् चराचरे जगति सामान्यविषेषरूपेण अन्तर्बहिश्व व्याप्य
अवस्थानात् । यस्मादेवं तस्मात् वायूरेव व्यष्टिः—अध्यात्माधि-

भूताधिदैवविभागेन व्यावृत्तरूपा विविधा सृष्टिर्यादृग्रिरित्यर्थः । तथा
वायुरेव समष्टिः – समा अनुगतरूपा केवलेन सूत्रात्मना सृष्टिर्योनिः ।

2. Translate into English extracts (a) and (b): —

(a) जीवेन न प्राणसंयुक्तेन अश्नितं पीतं च, रसतां गतं,
जीवच्छरीरं बध्नेयत् रसरूपेण, जीवस्य सन्नावे लिङ्गं भवति । अश्नीत-
पीताभ्यां हि देहे जीवस्तिष्ठति । ते च अश्नितपीते जीवकर्मानुसारिणी
इति ः जीवस्थितिर्निमित्ता रसः जीवकर्माच्छिन्नः जीवोपसंहारे न
तिष्ठति ।

(b) अविद्यायामन्तरे वर्तमानाः
स्वयं धीराः पण्डितम्मन्यमानाः ।
दन्द्रम्यमानाः परियन्ति मूढाः
अन्धेनैव नीयमानो यथान्धाः ॥
न साम्परायः प्रतिभाति बालं
प्रमाद्यन्तं वित्तमोहेन मूढम् ।
अयं लोको नास्ति पर इति मानी
पुनः पुनर्वशमापद्यते मे ॥
तं दुर्दर्शं गूढमनुप्रविष्टं
गुहाहितं गह्वरेष्ठं पुराणम् ।
अध्यात्मयोगाधिगमेन देवं
मत्वा धीरो हर्षशोकौ जहाति ॥

SANSKRIT.

GROUP B.

EIGHTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—PANDIT BAHUBALLABH SASTRI.

1. 'सर्वाख्यान्वाचार्यवन्ति' इतिसूत्रस्यान्वाचार्यपदस्य कोऽर्थः, 20
अत्र अन्वाचार्यपदेन पारिभाषिकार्थस्य ग्रहणम्° उत यौगिकार्थस्य
सप्रमाणं लिख । पारिभाषिकार्थग्रहणे कश्चिद्दोषो ऽस्ति न वा ?
लत्तणावृदेषा सर्वत्र । अस्य सूत्रस्य कोऽर्थः ? गोभिलोक्ताचमनक्रमा
ऽग्रहणे को हेतुः ? एषां मध्ये द्वयाः प्रश्नयोरुत्तरं लिख ॥

2. यद्वा वा उभयं चिकीर्षन्तु श्रोत्रं चैव ब्रह्मत्वं चैव एतेनैव 20
कर्मेन कृत्रं वोत्तरासंगं वोदकमण्डलुं दर्भवतुं वा ब्रह्मासने निधाय
तेनैव प्रत्यख्यानान्यचेष्टेत् ॥ पूर्वसाच्यमपरः स्यालौपाकः ॥ अनयोः
सूत्रयोः कोऽर्थः ?

3. अपरेणाग्निमानडुहं रोहितं चर्मे प्राग्ग्रीवंसुत्तरलोमास्तीर्णं 20
भवति ॥ अस्य कोऽर्थः ॥

कदा सौमन्तकरणं कर्त्तव्यम् ? कदा नामधेयकरणम् ? कदा
चूडाकरणसंस्कारः कर्त्तव्यः ? एतत्सर्वं सप्रमाणं लिख ॥

सावित्रमहः काङ्क्ष्ते । उदगयने च पच्चिणीं रात्रिम् । यज्ञसे
नेजस वति च । एषां कोऽर्थः ।

एषां प्रश्नानां मध्ये द्वयोः प्रश्नयोरुत्तरं लिख ॥

4. प्रतिदिशं सप्लाधिके प्रक्रमे । वृषौं चोपदध्यात् तत्र । एका 15
कर्षुः । इतरदन्वाचार्यं माषीनम् । उभयेषु उभयकामः ॥ एषां सूत्राणां
मध्ये त्रयाणां व्याख्या कार्या ॥

SECOND HALF.

Examiner—MAHAMAHOPADHYAYA DR. GANGANATH JHA, M.A., D.LITT.

1. Translate into Sanskrit *one* only of the following passages :—

(*a*) ' The world of our present consciousness is only one out of many worlds of consciousness that exist ; those other worlds must contain experiences which have a meaning for our life also ; and although in the main those experiences and those of this world keep distinct, yet the two become continuous at certain points and higher energies filter in. By being faithful to this inner belief we seem to keep more sane and true. We can put ourselves into the sectarian scientist's attitude and imagine vividly that the world of sensations and scientific laws and objects may be all. But whenever we do this, we shall hear the inward monitor whispering ' bosh ! ' Humbug is humbug even though it bear a scientific name, and the total expression of human experience invincibly urges us beyond the narrow scientific bounds. Assuredly the real world is more intricately built than physical science allows."

(*b*) " Sorrow and anguish, which result inevitably from the passions in the emotional life, constitute the purifying fire designed to purge away the dross of our nature and transmute it into the pure *Sattva*, where purity, goodness and truth are predominant. Brute appetite and blind impulse are first superseded by passion, and passion,—working, through sorrow and the reflection and sympathy which sorrow begets, its own extinction,—finally merges in, and is swallowed up in, love and absolute resignation."

(*c*) " Truth is within ourselves ; it takes no rise
From outward things. Whate'er we may believe,
There is an inmost centre in us all
Where Truth abides in fullness ; and around
Wall upon wall the gross flesh hems it in,
This perfect, clear, perception—which is truth ;—
A baffled and perverted carnal mesh
Binds it, and makes all error : and to know
Rather consists in opening out a way,
Whence the imprisoned splendour may escape
Than in effecting entry for a light
Supposed to be without."

SANSKRIT.

GROUP D.

FIFTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Examiner—MAHAMAHOPADHYAYA LAKSHMAN SASTRI.

SIX *questions are to be attempted in this half, selecting any three
from each group.*

The questions are of equal value.

Full marks—50.

GROUP A.

1. महावाक्यानामखण्डार्थप्रतिपादकत्वं यया रीत्या सा
प्रदर्श्यताम् ।

2. वेदादीनामनात्मत्वं कया युक्त्या प्रतिपादितम् ?

3. अखण्डार्थस्य लक्षणं किम् ?

4. प्रमाणत्वोऽनधिगतत्वविशेषणे दत्ते धाराबाहिकविज्ञानेष्व-
व्याप्ति: कया रीत्या वारणीया ।

5. विषयगतप्रत्यक्त्वप्रयोजकं निष्कृष्टं किम्प्रदर्शितम् ? कथ
हेतोश्च ? तन्निरूप्यताम् ।

6. ग्रामाख्यं स्वतो ग्राह्यमुत परतः ? विविच्योत्तरं साधक-
बाधकयुक्तिपुरस्सरं निरूप्यताम् ।

7. प्रवणमननादीनां मध्ये कथाङ्गत्वमङ्गित्वं वा मतभेदोल्लेख-
पूर्वकमुच्यताम् ।

GROUP B.

1. अर्थे विधिरपूर्वो नियमो वा परिसंङ्ख्या वा ? उपपत्ति-
सहितमुत्तरमुच्यताम् ।

2. साचिव्यरूपं किम् ? किमर्थं चाङ्गीक्रियते ?

3. अस्मत्खे इदमाकारवृत्तेरतिरिक्ता 'इदं रजत'मित्याकारिका
वृत्तिरङ्गीक्रियते न वा ? अङ्गीक्रियते चेत् कथ हेतो: ?

4.　प्रत्यक्षेण सहाद्वैतश्रुतेर्विरोधे कस्य बलीयस्त्वं कथा युक्त्या
प्रतिपादितम् ?

5.　मुक्तेरात्मस्वरूपत्वं तद्भिन्नत्वं वा ? युक्तिपुरस्सरमुच्यताम् ।

6.　मुक्तेश्वरभावापत्तिर्भवत्युत शुद्धब्रह्मरूपेणाऽवस्थानम् ? अत्र
मतभेदोल्लेखपूर्वकमुत्तरमश्यताम् ।

7.　यच्छादीनां विविदिषात्वं ज्ञानात्वं वा ? सयुक्तिकमुत्तर-
मुच्यताम् ?

8.　सुषुप्ताविद्याऽवृत्तिरङ्गीक्रियते न वा ?

SECOND HALF.

Examiner—BABU KOKILESWAR BHATTACHARYYA, M.A.

The figures in the margin indicate full marks.

Full marks—50.

1.　Explain the theory of Máyá as set forth in the *Siddhánta-lesha*.　9
What is your opinion about the unreality of the Máyá ?

2.　Describe the condition of a जीवन्मुक्त or the nature of the भ्रमज्ञान ।　8

3.　Briefly state the views set forth in the *Vedanta-Paribháshá* and　8
in the *Vedanta Sára* about the theory of Perception of external
objects.

4.　Translate into English the following extracts :—

(*a*) इह खलु धर्मार्थकाममोक्षाख्येषु चतुर्विधेषु मोक्त एव　9
परमपुरुषार्थः । 'न स पुनरावर्त्तते' इत्यादि श्रुत्या तस्यैव नित्यत्वा-
वगमात् ; इतरेषां त्रयाणां प्रत्यक्षेण 'तद्यथेह कर्म्मचितो लोकः
क्षीयते एवमेवामुत्र पुण्यचितो लोकः क्षीयते' इत्यादि श्रुत्या
चानित्यत्वावगमाच्च । स च ब्रह्मज्ञानादिति ब्रह्म तज्ज्ञानं तत्प्रमाणञ्च
सप्रपञ्चं निरूप्यते ।

(*b*) विशेषो हि भवति शारीर-परमेश्वरयोः । एकः—कर्त्ता　8
भोक्ता धर्माधर्म्मसाधनः सुखदुःखादिमांश्च । एकः—तद्विपरीतोऽपह-
तपाप्मादिगुणकः । यदि च सन्निधानमात्रेण वस्तुशक्तिमनाश्रित्य
कार्यसम्बन्धोऽभ्युपगम्येत, आकाशादीनामपि दाह्यादिप्रसङ्गः ।

(*c*) न हि अनभ्यस्ते विषये कौशलमिन्द्रियाणां भवति । पूर्वानु-　8
भववासनाप्रवृत्तानान्तु इन्द्रियाणां इह अभ्यासमन्तरेण कौशलमुप-

प्रद्यते । कृष्यते च कोषाञ्चित् कासुचित् क्रियासु चित्रकर्म्मादिलच्याषु
विनैव हि अभ्यासेन जन्मत एव कोशलं ? कासुचित् प्रयत्नसोकर्य्य-
युक्तास्वपि अकोशलं कोषाञ्चित् ।

<hr>

SANSKRIT.

Group D.

Sixth Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

First Half.

*Examiner—*Mahamahopadhyaya Pramathanath Tarkabhu-
shan.

1. "यद्याप्यन्त्र वेद्वाक्यानां विधिसंस्पर्शमन्तरेण प्रमाणत्वं न
दृष्टं तथाप्यात्मविज्ञानस्य फलपर्य्यन्तत्वान्न तद्विषयस्य शास्त्रस्य प्रामाण्यं
शकां प्रत्याख्यातुमु । न चानुमानगम्यं शास्त्रप्रामाण्यं येनान्यत्र 'दृष्टं
निदर्शनमपेच्चसे " । इति भाष्यं प्रथमान्त्रपदार्थाद् द्वितीयान्त्र-
पदार्थस्य विवेकः स्फुटीकरणीयः । फलपर्य्यन्तत्वादित्यत्र किं तावत्
फलं इति निर्द्देश्यं, तच्च फलं नियमनित्यं वेति विचारणीयं । ये
तावदनुमानगम्यं शास्त्रस्य प्रामाण्यं अङ्गीकुर्व्वन्ति तेषां तदनुमानप्रकारः
कीदृश इति प्रतिपादनीयं शास्त्रप्रामाण्यस्यानुमानगम्यत्वं कथं
सिद्धान्तिना नाङ्गीक्रियते ? फलपर्य्यन्तत्वाभावः शास्त्रप्रामाण्य-
प्रत्याख्यानायालमिति सूचयतो भाष्यकारस्य आश्रयः वैशद्यीन प्रति-
पादनीयः ।

अथवा,—

सोऽयमभ्युपगमो द्रव्यगुणयोरपृथग्ग्रैशल्वेऽभ्युपगम्यमाने बाध्येत ।
अथाप्रयक्कालखमयुतसिद्धत्वं उच्येत सम्यद्चित्रयोरपि गोविषाणयोर-
युतसिद्धत्वं प्रसज्यत । तथाऽप्रयक्कस्वभावत्वे व्युतसिद्धत्वे न द्रव्य-
गुणयोरात्ममेदः सम्भवति तस्य तादात्म्येनैव प्रतीयमानत्वात् । इति
भाष्यं प्रकृतसङ्गतिं प्रश्यं व्याख्यायताम् । अत्र द्रव्यगुणयोरपृथग्ग्रैशल्वं
36

कथमभ्युपगम्यतां ? द्रव्यं संयोगेन भूतलाश्रे वर्त्तते, गुणस्तु समवायेन
द्रव्ये भूतलादिवर्त्तिनि वर्त्तते, इत्येवमेव आरम्भवादिनामभ्युपगमात् ।
तथा इति तद्रा कथ परामर्शः ? द्रव्यं गुणवत् इति सम्बवादिसिद्ध-
प्रतीतौ सत्यां कथं "तादात्म्येनैव प्रतीयमानत्वात्" इति भाष्योक्तिः
सङ्गच्छते ? अयुतसिद्धत्वमिति परस्य कस्तावद्द योगलभ्यार्थः ?
स्वप्रतियोगिकसमवायानुयोगित्वं स्वानुयोगिकसमवायप्रतियोगित्वं वा
अयुतसिद्धत्वमित्युक्तौ का हानिः स्यात् ।

2. यानि सूत्राणि आलम्बय आनन्दमयाधिकरणं प्रवृत्तं तानि   15
स्वरूपतो निर्दिश्य तद्व्याख्यासुखेन तदधिकरणमारच्यताम् ?

                                अथवा,—

   यानि सूत्राणि आलम्बय ज्योतिब्ब्रणाधिकरणं प्रवृत्तं तानि
स्वरूपतो निर्दिश्य तद्व्याख्यासुखेन तदधिकरणमारच्यताम् ।

3.   "संभोगप्राप्तिरिति चेन्न वैशेष्यात्" ।   20
        "अन्तर्य्याम्यधिदैवादिषु तद्धर्म्मव्यपदेशात्"
        "वृद्यपेत्तया तु मनुष्याधिकारत्वात्" ।
        "संस्कारपरामर्शोत्तदभावाभिलापाच्च" ।
        "ज्योतिरुपक्रमा तु तथा ह्यधीयत एके" ।
        "इतरव्यपदेशाद्धिताकारणादिदोषप्रसक्तिः" ।
        "न च पर्य्यायादप्यविरोधो विकारादिभ्यः" ।
        "यावदात्मभाविल्वाच्च न दोषस्तद्दर्शनात्" ।

   इत्येतेषु चत्वारि सूत्राणि यणायथमध्यायपादाधिकरणसङ्गति
प्रदर्शनपुरःसरं भाष्योक्तदिशा व्याख्येयानि ।

                            SECOND HALF.

Examiner—BABU NALINIMOHAN MUKHERJEE, M.A.

   1. Explain any *five* of the following terms as used in the Vedānta   10
philosophy :—

       सम्बयम्, इार्हविद्या, उपाधिः, सूत्रात्मा, अनुबन्धः, समाधिः,
सायुज्यम्, आघ्यानम् ।

2. Establish, after the manner of the *Vedāntins*, the existence of 7
a conscious self overlying the body of *Jiva*, by showing the fallacy
of the materialistic theory that consciousness is the product of the
conglomeration of matter.   *Or,*

Discuss fully the beatitude attainable from the worship of quali- 7
fied (सगुणम्) *Brahman.*

3. Examine the arguments in any *two* of the following extracts, 8
giving your opinion about them :—

(a) उपचितापचितगुणलं हि यति भेदव्यवहारे सगुबे ब्रह्मण्युप-
पद्यते, न निर्गुंबे परस्मिन् ब्रह्मणि ।

(b) न च ब्रह्मविदः सर्व्वगत-ब्रह्मात्मभूतस्य प्रत्योष्कासकर्मेब
यत्फ्रान्तिर्गतिर्वोपपद्यते, निमित्ताभावात् ।

(c) यद् सर्व्वगतं सर्व्वान्तरं सर्व्वोत्मकं च परं ब्रह्म तस्य गन्तव्यता
न कदाचिद्रुपपद्यते ।

(d) न च श्रावापोद्वापभेदाद्वेद्याभेदो विद्याभेदस्याश्चुरः,
कस्यचिद्वेद्यांश्याबापोद्वापयोरपि भूयसी वेद्याग्भेरभेदावगमात् ।

4. Translate into Sanskrit *either* of the following extracts :—   25
(a) Indian philosophy, and in particular its earliest form, the
philosophy of the Upanishads, or Vedānta, is governed throughout
by two needs First, there is the need to give consistency and cohe-
rence to existing imagery, physical and hyperphysical, to work out
a conception of the totality of things. Secondly, there is the need
to put a stop to the miseries of metempsychosis. The idea of transmi-
gration, foreign to the Indo-Aryans of the Vedic hymns, appears to have
been taken up by their successors from the lower races with which
they intermingled, while retaining their supremacy among them.
The Indo-Aryans of the Vedic hymns found life pleasurable and ex-
citing. They prayed to the gods for their hundred years of it, and
for an after-life with the whole body.

(b) Brahman is both the real and the operative cause of the
world. It is the real cause, inasmuch as the transmigratory series
fictitiously overlies it. 'Over this the sky, the earth, the welkin,
are woven." "Illusion," says Sankaráchárya, "the aggregate of
the powers of all causes and effects, reposes upon Brahman, woven
across and across it, as the potentiality of the banyan tree reposes
in the seed of the tree." "A fictitious object," says Ānandagiri,
"such as the snake seen in a piece of rope, has a relatively real sub-
stratum in the piece of rope ; the transmigratory series, unreal because
phenomenal, has a real substance beneath it." Brahman is the
operative cause of the world, inasmuch as the world-projecting illu-
sion, inert of itself, becomes active by proximity to Brahman.

SANSKRIT.

GROUP D.

SEVENTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

*Examiner—*DR. V. A. SUKHTANKAR.

(a) ननु च सकलमेरनिवृत्तिः प्रयत्नविरुद्धा कथमिव शास्त्रार्थ-
जन्यविज्ञानेन क्रियते । कथं वा रज्जुरेषा न सर्प इति ज्ञानेन प्रयत्न-
विरुद्धा सर्पनिवृत्तिः क्रियसे'। तत्र द्वयोः प्रयत्नयोर्विरोधः । इह तु
प्रयत्नमूलस्य शास्त्रस्य प्रयत्नस्य चेति चेत्तुल्ययोर्विरोधे कथं बाध्य-
बाधकभावः । पूर्वोत्तरयोर्दुष्टकारणत्वनष्टतदभावाभ्यामिति चेत्,
शास्त्रप्रयत्नयोरपि समानमेतत् । एतदुक्तं भवति । बाध्यबाधकभावे
तुल्यत्वसापेत्तत्वनिरपेत्तत्वादि न कारणं ज्वालामेरनुमानेन प्रयत्तोप-
मर्दोयोगात् । तत्र हि ज्वालैकं प्रयत्तेणावगम्यते । एवं सति द्वयोः
प्रमाणयोर्विरोधे यत्समाव्यसानान्यथासिद्धि तद्वाध्यम् । अनन्यथासिद्धि-
मनवकाश्रमितरद्वाधकमिति सर्वत्र बाध्यबाधकभावनिर्णय इति ।

(b) न च वाच्यं स्वाप्रस्य इत्यादिज्ञानस्यासत्यस्य परमार्थशुभा-
शुभप्रतिपत्तिहेतुभाववदविद्यामूलत्वेनासत्यस्यापि शास्त्रस्य परमार्थ-
भूतब्रह्मविषयप्रतिपत्तिहेतुभावो न विरुद्ध इति । स्वाप्रज्ञानस्या-
सत्यत्वाभावात् । तत्र हि विषयाणामेव मिथ्यात्वम् । तेषामेव बाधो
दृष्यते न ज्ञानस्य । तख्योत्पत्तिमत्स्वादर्थक्रियाकारित्वाच्च सत्यत्वमव-
सीयते । इत्यादीनामभावे कथं तद्द्वयः सत्या भवन्तीति चेन् ।
एतद्द्वयोनां सालम्बनत्वमात्रनियमात् । अर्थस्य प्रतिभासमानत्वमेव
ज्ञालम्बनत्वेऽपेत्तितम् । प्रतिभासमानता चास्त्येव दोषवशात् । स तु
ब्राधितोऽसत्य इत्यवसीयते ।

(c) यथा पदार्थस्य कस्यचित्पुकारतया सम्बन्धस्य तदुपश्लक्-
षिद्धिस्थितिप्रतीतिभिरुत्सन्नावकानां शब्दानां स्वाभिधेयविशिष्टद्रव्य-

वाचिद्वाद्धर्मान्तर्विशिष्टतद्द्व्यवाचिना शब्देन सामानाधिकरण्यं
युक्तमेव । यत्र पुनः प्रथक्ताषिद्धस्य स्वनिष्ठस्यैव द्व्यस्य कश्चिद्धर्म-
विद्व्यान्तरप्रकारत्वमिष्यते तत्र मत्वर्थीयप्रत्यय इति निरवद्यम् ।
तदैवं परमात्मनः शरीरतया तत्प्रकारत्वार्थर्विद्दृष्टिष्टस्य जीवस्यापि
जीवनिद्दृष्टविशेषरूपा अथंत्वमिद्व्यादिशब्दाः परमात्मानमेवाचक्षत इति
तत्त्वमसीति सामानाधिकरण्यानोपसंहृतम् । एवञ्च सति परमात्मानं
प्रति जीवस्य शरीरतयान्वयाज्जीवगता धर्माः परमात्मानं न स्पृशन्ति ।

एषामुद्धृतानां भाष्यांशानामनुवादः सरलसंस्कृतभाषयाऽङग्ल-
भाषया वा कार्यः ।

2. "शास्त्रयोनित्वात्" इत्यस्मिन् सूत्रे ब्रह्मणो जगन्निर्मातृत्व-
सिद्धये पूर्वपचिद्वा प्रयुक्तान्यनुमानानि प्रदर्श्य तेषु श्रीभाष्यक्रन्मते ये
दोषाः सन्ति ते स्पष्टं निरुपयन्ताम् ।   10

3. वेदान्तशास्त्रं शारीरकमित्यधीयत इत्यस्य रामानुजमते किं
प्रयोजनम् ? तत्र प्रमाणभूताः श्रुतयो निरूप्य तासां "नेह नानास्ति
किञ्चन" इत्यादिभिर्भेदनिषेधश्रुतिभिरविरोधो भाष्यकृता कथं
समर्थितः ।   10

4. निम्ननिर्दिष्टश्रुतिवाक्यानां श्रीभानुसारिणी व्याख्याकार्याः—   10

(a) सत्यं ज्ञानमनन्तं ब्रह्म ।

(b) ब्रह्मविदाप्नोति परम् ।

(c) न दृष्टेर्द्रष्टारं पश्येर्न मतेर्मन्तारं मन्वीथाः ।

(d) यदा ह्येवैष एतस्मिन्नुदरमन्तरं कुरुते । अथ तस्य भयं
भवति ।

(e) एकमेवाद्वितीयम् ।

5. निम्नलिखितवाक्यानि स्फुटं व्याख्येयानि—   10

(a) शास्त्रं प्रयोजनपर्यवसायि एव ।

(b) अपच्छेदन्यायेन निर्गुणवाक्यानां गुणापेक्षत्वेन परत्वा-
द्वलीयस्त्वम् ।

(c) गकारादेर्बौधकस्यैव श्रीशब्दात्वेन शब्दत्वम् ।

(d) मिथ्यात्वं नाम प्रतीयमानत्वपूर्वकयथावस्थितवस्तुज्ञान-
निवर्त्यत्वम् ।

(e) इतिहासपुराणाभ्यां वेदं समुपबृंहयेत् ।

6. प्रयत्नं निर्विशेषसन्मात्रग्राह्रीति पक्षः सयुक्तिकं प्रतिपाद्य   10
भाष्योक्तरिशा खरुडतासु ।

7. "सदेव सोम्येदमग्र आसीत्" इत्यत्र सच्छब्देन परं ब्रह्मैव   10
प्रतिपाद्यं न प्रधानमिति सिद्धौ इत्तत्प्यधिकरणोक्तप्रमाणानि
निरूपणीयानि ।

SECOND HALF.

Examiner—VEDANTABISARAD N. S. ANANTAKRISHNA SASTRI.

1. यथाभिमतं प्रश्नत्रयं समाधेयसु प्रथमो नियतं समाधेयः ।   9
कानि नास्तिकदर्शनानि कानि चार्स्तिकदर्शनानि षट्? नास्तिकव्यपदेश
आस्तिकव्यपदेशश्च किन्निब्वन्धनः? वेदप्रामाण्यवादिनो वैशेषिकाः
वेदप्रामाण्यवादिनोऽपीश्वरमनङ्गीकुर्वाणा निरीश्वरमीमांसका निरीश्वर-
सांख्याश्चास्तिका वा नास्तिका वा सर्वं विविच्य निरूप्यतासु ।

2. असत्कार्यवादं सत्कार्यवादं सद्विवर्तवादञ्च सोपपत्तिकं   8
संगृह्य तत्रान्यतमपत्तः समर्थ्यतासु ।

3. अद्वैतदर्शनस्यैव पारमार्थ्ये दर्शनान्तराणां पूर्वाचार्यप्रवर्तितानां   8
किं प्रयोजनमभिमतं भवति? केन केन प्रकारेण दर्शनान्तरैरद्वैत-
दर्शनस्याविरोधः?

4. जीवमध्यमपरिमाणत्वे तत्रणुपरिमाणत्वे, तन्महत्परिमाणत्वे   8
तत्रनेकत्वे तत्रैकत्वे च युक्तयः संगृह्यन्तासु ।

5. सौगताद्वैतमतयोः किय्यदवधि साम्यसु? कुतश्च सौगतमतस्य   8
हेयता? एकसौगतमूलस्य सौगतमतस्य चातुर्विध्ये किं निमित्तसु?
चतुर्णां प्रकाराणां प्रवर्त्तकाः के? वैभाषिकादिसंज्ञाया किं निमित्तसु?

6. स्यादस्तीत्यादिसप्तभङ्गीं विलिख्य भङ्गीभेदः किन्निब्वन्धनः?
स्यात्पदस्य भङ्गपदस्य पुद्गलास्तिकायपदस्य च कोऽर्थः इति
विलिख्यतासु ।

SANSKRIT.

GROUP D.

EIGHTH PAPER.

Examiner—PANDIT SITARAM SASTRI.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

1. 'स आत्मा विचिन्त्यः' इति आत्मनो ज्ञानविषयतोच्यमाना 'नान्तःप्रज्ञम्' इत्यादिग्रन्थप्रतिपाद्यज्ञान।विषयत्वोक्तिं विरुणद्धि न वा? न चेद्, अविरोधप्रकारः प्रदर्शनीयः । 10

'अदृश्यमव्यवहार्यमग्राह्यमलक्षणमचिन्त्यमव्यपदेश्यम्' इत्यैतैः शब्दैरात्मनि किं किं व्युदस्यते ?

उपनिषदोर्मुग्धमागन्धकानामभ्यां व्यवहाराभिप्रायः स्फोरणीयः ।

2. 'नित्यं विभुं सर्वगतम्' इत्यादिनाऽऽत्मनोऽपरिच्छिन्नत्वमुक्त्वा 'एषोऽणुरात्मा चेतसा वेदितव्यः' इति तस्याणुत्वमुच्यमानं कथं सङ्गच्छते ? अपरिच्छिन्नत्वाणुत्वयोः कतरद्युक्तिमद् आत्मनि, कुतश्चेति विशदनीयम् । 10

उपनिषच्छब्दव्युत्पत्तिः प्रदर्श्या ।

3. एकद्रव्यङ्गाङ्कितयोरन्तरं व्याख्याय त्रयङ्गाङ्कितः सम्यगुत्तर- णीयः । 10

(1) श्वेताश्वतरीयोपनिषद्माष्यस्य शाङ्करत्वं न वा ? अशांकरत्वे प्रमाणानि प्रदर्श्यानि ; सत्स्वपि तेषु प्रमाणेषु शांकरत्वं व्यवस्थापयितुं यदि शक्येत, सम्यक् प्रदर्शनीयम् ।

(2) साङ्ख्यशास्त्रश्वेताश्वतरोपनिषदोः पौर्वापर्यं पौरस्त्यपा- श्चात्त्ययोः कौदृशो मतभेदः ? पाश्चात्तयोक्तविरोधपरिहारपूर्वं पौरस्त्यमतं स्थापयितुं यदि शुश्रकम्, तर्हि तत्प्रकारो दर्शनीयः ।

(3) 'तमेकनेमिं त्रिवृतं षोडशान्तं शताधारं विंशतिप्रत्यराभिः । अष्टकैः षड्भिर्विश्वरूपैकपाशं त्रिमार्गभेदं द्विनिमित्तैकमोहम् ।

अस्य मन्त्रस्याभिप्रायः सम्यक् सम्दर्श्यः ।

4. 'ते तत्र यथा विवेकं न लभन्ते ... एवमेव खलु सोम्येमाः 10
सर्वाः प्रजाः सति सम्पद्य न विदुः ' – सति सम्पद्यामहे'' इति ।

कोऽत्र सति सम्पादः ? कदा, कथं च स भवति ? सच्छब्देन
किमत्र उच्यते ?

'ऐतदात्म्यमिदं सर्वम्' इति सर्वस्यैकात्मरूपतोच्यमाना घट-
पटाद्यनेकविधसांसारिकवस्तुषु प्रत्यहमनुभूयमानमेदैर्विरुद्धा कथं
संगच्छते ?

5. मोत्तसाधनता केवलस्य ज्ञानस्य, कर्मणो वा, उभयोर्वा 10
समञ्चलयोर्मिलितयोरिति विचार्य सिद्धान्तनौयोऽभितः पक्षः ।

छान्दोग्योपनिषद्ब्रह्मोपनिषदन्तरेभ्यो विशेषः सङ्किप्य संप्रदर्श्यः ।

1. Attempt *any two* of the following:— 10
(*a*) Explain the word *Upanishad* and give a short account of the *upanishads* belonging to the *Yajurveda*.
(*b*) What do you understand by the term *Vedānta*? Refer to passages in your text-books (Upanishads) where the term occurs. Briefly trace the development of post-vedic vedāntism from vedic vedāntism.
(*c*) Explain in Sanskrit:—

मायां तु प्रकृतिं विद्यान्मायिनं तु महेश्वरम् ।
तस्यावयवभूतैस्तु व्याप्तं सर्वमिदं जगत् ।

Is माया in the above verse used in the same sense as माया of post-vedic vedānta? If not, point out the difference in meaning.

2. Attempt *one* of the following:— 5
(*a*) Estimate the value of the following statement:—

सर्वोपनिषदो गावो (दोग्धा गोपालनन्दनः ।
पार्थो वत्सः सुधीर्भोक्ता) दुग्धं गीतामृतं महत् ॥

Support your answer with quotations from, or references to, the Gitā and the Upanishads.

(*b*) What, according to Sankara, is the main teaching of the Gitā, and how does he attempt to establish it? Advance your own opinion if you happen to differ from Sankara.

3. State and explain, in Sanskrit, the philosophy taught in the 5
following verse:—

ज्ञानं ज्ञेयं परिज्ञाता त्रिविधा कर्मचोदना ।
करणं कर्म कर्तेति त्रिविधः कर्मसंग्रहः ॥

4. Attempt *one* of the following.

   (*a*) Fully explain in Sanskrit:—

यावानर्थ उदपाने सर्वतः संप्लुतोदके ।
तावान् सर्वेषु वेदेषु ब्राह्मणस्य विजानतः ॥

Criticise Sankara's explanation of the above verse.

   (*b*) Give the meanings of the following terms as used in the Gitā:—

त्यागी, चैत्र, पुरुषोत्तम and लोकसंग्रह .

5. Translate *any two* of the following passages into English:—   25

(*a*) ब्रह्मोपासने देवानामव्यधिकारोऽस्ति । कुतः ? तेषामर्यित्व-संभवात् । न च परमेश्वरस्य देवानां च पदं समानं, यतः सामान्येन सुखवाचकोऽपि स्वर्गशब्दः प्रकरणादिना विशेषमभिधत्ते; यथेश्वरशब्दः स्वामिसामान्यवाचकः प्रकरणवशात् "उपेयात्रीश्वरं चैव योगक्षेमार्थ-सिद्धये" - इत्यादिषु जनपदार्धपतिसामान्यवाची राजविषयो; ब्रह्मणः प्रकरणे पुनरयं निरतिशयैश्वर्यवाची तद्विषयो भवति, तथा सुखमात्र-वाचकः स्वर्गशब्दः प्रकरणेन प्रमाणान्तरोपपत्त्या च देवानां पदं ध्यायेषु(ल्)क्षातिशयत्वादिदोषकलुषितस्वल्पसुखमभिधत्ते, परब्रह्मणः शिवस्य पदं तु निरतिशयसुखस्वरूपमनावृत्तिलक्षणमेव ब्रूते । अतः सातिशयत्वादिदोषदुष्टसुखपदवर्तिनां निरतिशयसुखं ब्रह्मपदं प्रत्यर्यित्वं संभवत्येव ।

(*b*) युक्तमेव ब्रह्मणो वेदकर्तृत्वम् – "अस्य महतो भूतस्य निःश्वसितमेतद् यदृग्वेदो यजुर्वेदः सामवेदः" इति श्रुतेः, निःश्वसितवद् वेदराशेः अप्रयत्नेन ब्रह्मणः प्रादुर्भावात् ।

अष्टात्रशानामेतासां विद्यानां भिन्नवर्त्मनाम् ।
आदिकर्ता कविः साक्षाच्छूलपाणिरिति श्रुतिः ॥

इति परमेश्वरस्य सकलविद्याकर्तृत्वप्रतिपादनाच्च । षष्ठः प्राक् स्वात्मनि विलीनानां वेदानां पूर्वंपूर्ववर्णानुपूर्व्यानुरूपरचनया पुनः कर्ता भवति सर्वज्ञः परमेश्वरः । अत एव वेदानामपौरुषेयत्वमैश्वरकार्यत्वं च । येषां राागद्वेषादयस्तेषां वचनमप्रमाणमपि भवति । निरस्तसमस्त-दोषकलङ्कस्य निरुपप्लवनिरतिशयज्ञानप्रत्यक्षानुभूयमानत्रैकालिकवस्तु-विलासस्य स्वतःप्रमाणस्य परमेश्वरस्य परमाप्तस्यावाप्तसमस्तकामस्य शिवस्य ब्रह्मणो वचनं तु प्रमाणमेव भवति । "ईशानः सर्वविद्यानाम्"

"स नो देवः शुभया स्मृत्या संयुनक्तु" इति हि परमेश्वरस्य सर्व-
विद्याप्रवर्तंकत्वं शुभस्मृतिहेतुत्वं च श्रूयते । अतः सर्वेऽस्त्वव-
भासकानां वेदानां परमेश्वरकर्तृकतया परमेश्वरस्य सर्वज्ञता निश्चीयते,
प्रज्ञातस्य वक्तुमशक्यत्वात् ॥

(c) ननु जीवस्य भगवदंशत्वे विधिविषयत्वाभावात् कर्म-
सम्बन्धाभावेन कथं फलसम्बन्धः । जीवस्य च पुनरनेकदेहसम्बन्धाद्
कः शूद्रः का भार्येति ज्ञानमप्यशक्यम् । अतः कर्मसागरेऽस्य व्याकुलत्वात्
कथं जीवस्यापि दुःखित्वमित्याशङ्क्य परिहरति । अनुत्तापरिहारो विधि-
निषेधो जीवस्य देहसम्बन्धात् या देहो यदा गृहीतस्तत्कृतौ । यथा
श्वाग्निष्वखालभार्ग्यस्यमुद्रं तद्हृटादिष्व परिगृह्यते एवमुत्कृष्टं परि-
गृह्यते । तथा जीवेऽपि देहसम्बन्धकृतः सम्बन्धश्चाध्यासिको भगवत्-
कृतश्च । आध्यासिको स्वच्छानान्निवर्तते द्वितीयो भगवतैव । जीवन्मुक्ता-
नामपि व्यवहारदर्शनात् । श्रुतिस्तु भगवत्कृतसम्बन्धमेवा प्रत्यायि-
होऽत्रिकं विधत्ते । अनया विद्या स्वज्ञानज्व बं धयन्तो कम्मीणि न
विरुध्यात् । शाब्दज्ञानस्य पूर्वमेव सिद्धत्वात् । कथं सिद्धवद् यावज्जीवं
विदध्यात् । नाशोऽपि देहसम्बन्ध एव ॥

SANSKRIT.

GROUP E.

FIFTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions are of equal value.

Full marks—48.

FIRST HALF.

*Examiner—*PANDIT KAMAKHYANATH TARKABAGISA.

Answer ANY SIX *of the following questions.*

1. "पूर्वंभाविले द्वयोरेकतरस्य हाने अन्यतरयोगः " इति सूत्रेण कया
रीत्या प्रधानस्य जगत्कारणत्वं व्यवस्थापितं ? प्रधानस्य जगत्कारणत्वं

श्रुतिसिद्धं न वा ? श्रुतिसिद्धञ्चेत् कया श्रुत्या सिद्धं ? परमाणुकारणवादः प्रागभावकारणवादश्च कथं न सम्भवति ? जगतोऽवस्तुत्वं केन सूत्रेण कया रीत्या निरसनीयम् ?

2. प्रमाणसामान्यस्य प्रमाणविशेषाणाञ्च कानि लक्षणानि ? प्रमाणस्य त्रैविध्ये पराभिमतानां उपमानाद्यप्तप्रभावसम्वेतिल्लानामेतन्मते कस्मिन् कस्मिन् प्रमाणे कया रीत्याऽन्तर्भावः ?

3. केन सूत्रेण कया रीत्या स्फोटात्मकशब्दनिराकरणं ? तदनङ्गीकारे उत्तरोत्तरवर्णोच्चारणकाले पूर्व्वपूर्व्ववर्णनाशात् अनेकवर्णघटितपदेन कथं पदार्थोपस्थितिर्भवितुमर्हति ? "पूर्व्वविह्नमत्तस्याभिव्यक्तिर्व्वीजेनेव घटस्य" इति सूत्रान्थितशङ्का कया रीत्या केन सूत्रेण निराकृता भवति ?

4. "जगत्सत्वमनुद्भूतकारणजन्यत्वाद् बाधिकाभावात्" इति सूत्रस्य किं व्याख्यानं ? एतत्सूत्रव्याख्यानावसरे "संक्षेपाद् जगदुच्यते" इत्यादि-सन्दर्भेण वृत्तिकृता यया रीत्या जगदुवर्णितं सा रीतिर्विशदीकृत्य प्रदर्शनीया ।

5. "गतिश्रुतेश्च व्यापकत्वेऽप्युपाधियोगाद् भोगदेशकालाभो व्योम-वत्" इत्येतत्सूत्रस्योत्थितौ किं बीजं ? सूत्रस्यास्य व्याख्यानं वृत्तिकारोक्तरीत्या विशदीकृत्य प्रदर्शनीयम् ।

6. कोऽयं सत्कार्य्यवादः ? असत्कार्य्यवादे च उत्पत्त्रनन्तरं कार्य्यस्य सत्त्वानुभयत्र वैलक्षण्यं कया रीत्या समर्थनीयं ? सत्कार्य्यवादसाधनार्थं ये पञ्च हेतवः कारिकायां प्रदर्शिता भाष्योक्तरीत्या तेषां प्रत्येकादाहरणं प्रदर्श्य सत्कार्य्यवादो व्यवस्थापनीयः ।

7. बीजविनाशानन्तरं अङ्कुरोत्पत्तिदर्शनात् बीजविनाशस्यैवाङ्कुरोत्-पत्तिकारणत्वं युज्यते, तस्मादुक्तं सत्कार्य्यवादव्यवस्थापयितुः साङ्ख्यदर्शन-प्रवेतुरभिप्रायं वर्णयित्वा यया कारिकया व्यक्तादिव्यतिरिक्तः पुरुषः साधितः यया च कारिकया पुरुषबहुत्वं साधितं तत्तत्कारिकाद्वयस्य तात्पर्य्यं भाष्यप्रश्रितरीत्योपवर्णनीयम् ।

8. का अष्टौ विह्रयः ? तासां कानि स्वरूपानि ? तासां शास्त्रान्तरे कानि संज्ञान्तराणि निर्दिष्टानि ? पूर्व्वोऽङ्कुरश्चित्रिविध इत्यत्र पूर्व्वपदेन कासां परासर्गः । तासाञ्च कया रीत्या अङ्कुरसादृश्यं ? निवारक इत्यनुक्ता अङ्कुरत्वोत्कीर्त्तने प्रन्थकर्त्तुः कोऽभिप्रायः ?

Second Half.

Examiner—Babu Kokileswar Bhattacharyya, M.A.

Full marks—52.

1. State the arguments employed by *Iswar Krishna* in favour of   10
the distinct existence of पुरुष, and briefly discuss each of these argu-
ments.

2. Discuss the validity of the following argument :—   10
"There is no genus (जाति), as it is nothing but similarity (सादृश्य)
what we apprehend in different individuals."

3. Explain the Shankhya theory of *Causality*.   8

Or,

Explain the term मन्वत्त्व. Is मन्वत्त्व the same principle as the
चिरक्षागर्भ of the Vedantists ?

4. Translate into English *any two* of the following extracts :—

(*a*) न च चौरप्रवृत्तेरपि ईश्वराधिष्ठाननिबन्धनत्वेन साध्यत्वान्न   12
साध्येन व्यभिचार इति सात्मतं, प्रत्तावत्प्रवृत्तेः स्वार्थकार्ष्णाभ्यां
व्याप्तत्वात् । ते च जगत्सगांत् व्यावर्त्तमाने प्रत्तावत्प्रवृत्तिपूर्व्वंकत्वमपि
वारयति । न हि अवाप्तसकलेप्सितस्य भगवतो जगत्सङ्गनः किमप्यभि-
लषितं भवति, नापि काम्यत्वादस्य सर्गों प्रवृत्तिः, प्राक् सर्गात्
जीवानामिन्द्रियशरीरविषयानुत्पत्तौ दुःखाभावेन कथ प्रहाणेच्छा
स्यात् ?

(*b*) आत्मा व्यापको, नास्य धर्म्मादिसम्बन्धो, नापि च्ञानं ?   12
किन्तु शरीरावच्छेदेन सदृङ्क्रियायोगवञ्जीवसम्बन्धेन मनोयोगात्
जीवात्मेयुच्यते । मनसा अविनाभूता प्रकृतिरिति प्राकृतधर्म्माधर्म्म-
च्ञानाच्ञानसुखदुःखाद्यहङ्कारेन्द्रिय-तद्विषयजन्यादिसानिव   लच्यते ।
सात्त्विकांशेन प्रकृतेः स्वच्छत्वात् तत्प्रतिविम्बित आत्मा प्रकृतिकर्त्तृत्वा-
दिकमात्मन्यभिमन्यते ।

(*c*) कश्चिन्नृपो मृगयां गतो वने सुन्दरीं कन्यामपश्यत् । ताम-   12
पृच्छत् का त्वमिति । सा प्राह राजदुहितादं । राजा प्राह मां
भजस्व । सा प्राह वाढं, किन्तु समयं कुरु, त्वया जलं मम न
दर्शनीयमिति । एवमस्त्वित्युक्ता तस्याः पाणिं जग्राह । एदं गते काले
क्रीड्यायासिता कुत्र जलमिति राजानं पप्रच्छ । राजापि सम्भ्रमात्
समयं विस्मृत्य जलमदर्शयत् ।

SANSKRIT.

GROUP E.

SIXTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—BABU DHIRESCHANDRA ACHARYYA, M.A., B.L.

Answer any FIVE *of the following.*

एकोऽद्वितीय इति वेदवचांसि पुंसि
सर्वोभिमानविनिवर्त्तनतोऽस्य मुक्तेः ।
वैधर्म्यलत्तवाभिदा विग्रहं वदन्ति ।
नाखर्ह्लतां ख इव घर्मश्रतावरोधात् ॥

1. Explain the above stanza and critically establish the plurality **15** of souls, referring to the appropriate sūtras.

2. What are the important points in which Vijnānabhikshu dif- **15** fers from Vāchaspati Misra in his exposition of the Sānkhya Philosophy? Critically estimate the value of each exposition.

3. Explain according to Vijnānabhikshu the following sūtras:— **15**

   (i) आब्रह्मस्तम्बादभेदतो वा गुणसामान्यादेस्तत्सिद्धिः प्रधानव्यप-
देशात्तत्रा ।

   (ii) तत्कर्मार्जितत्वात् तदर्थमभिचेष्टा लोकवत् ।

   (iii) समदर्शेकं लिङ्गम् ।

   (iv) उभयत्राप्यन्यथासिद्धेर्न प्रत्तमनुमानं वा ।

4. Explain the Sānkhya theory of error (ख्यातिवाद) and show **15** the untenability of the rival theories.

5. What are the Tushtis? Quote and explain according to Va- **15** chaspati Misra the kārikā which treats of them. How does Vijnānabhikshu criticise him? Is the criticism justifiable?

6. Explain the following kārikās, according to Vāchaspati Misra:— **15**

   (i) भेदानां परिमाणात् समन्वयाच्छक्तितः प्रवृत्तेश्व ॥
कारणकार्य्यविभागादविभागाद्वैश्वरूपस्य ॥

   (ii) सङ्घातपरार्थत्वात् त्रिगुणादिविपर्य्ययादधिष्ठानात् ।
पुरुषोऽस्ति भोक्तृभावात् कैवल्यार्थं प्रवृत्तेश्व ॥

7. तत्र सामान्यतः सिद्धो ज्ञानेऽहमितिधीबलात् ।
    दृष्टान्तो नित्यविभ्वादिधर्मैरेव च साध्यते ॥

Show how Vijnânabhikshu proves the attributes of the soul referred to in the above stanza, in the Sânkhyasara.

SECOND HALF.

Examiner—BABU ANANTAPRASAD BANERJEE, M.A.

Translate into idiomatic Sanskrit any *two* of the following ex- 25 tracts:—

(a) Self consciousness is egoism. Thence proceeds a two-fold creation, the eleven-fold set and the five elemental rudiments. From modified egoism originates the class of eleven imbued with goodness; from egoism as the source of the elements originate the rudimentary elements, and these are affected by darkness; but it is only from egoism as affected by activity that the one and the other rise. The intellectual organs are 'the eyes, the ears, the nose, the tongue, and the skin; those of action are the voice, feet, hands, arms, and the organ of generation. In this set is mind, which has the character of each; it determines, and it is an organ, like the other ten, from having a common property with them.

(b) As one single man supports a variety of characters, through the force of association,—being, through association with his beloved, a lover; through association with one indifferent, indifferent; and, through association with some other, something other,—so the Mind, also, through association with the organ of vision, or any other, becomes various, from its becoming one with the organ of vision, or any other; by its being, thereby, distinguished by the modification of seeing, or the like. The argument in support of this is that—by reason of the varieties of transformation of which the Qualities are susceptible, there is a diversity of their product, the Mind, according to circumstances.

(c) Nor can we say, with the Vedântin that the world is an illusory emanation from the one existent Brahman, because we have no contradictory evidence to preclude by its superior validity the *primā facie* belief that the external world is real, as we have in the case of mistaking a rope for a snake, where a closer inspection will discover the error; and again, where the subject and the attributed nature are so dissimilar as the pure intelligent Brahman and the unintelligent creation, we can no more allow the supposed attribution to be possible than in the case of gold and silver which no one mistakes for each other. Hence we conclude that an effect which is composed of happiness, misery, and stupidity, must imply a cause similarly composed.

SANSKRIT.

GROUP E.

SEVENTH PAPER.

FIRST HALF.

Examiner—MAHAMAHOPADHYAYA LAKSHMAN SASTRI.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Full marks—50.

Answer any FIVE.

उल्लिखितानां मध्ये पञ्चप्रश्नाः समाधेयाः ।

1. योगस्य किं लक्षणं दर्शितम् ?

2. सम्प्रज्ञातसमाधेः स्वरूपं तद्भेदाश्च प्रदर्शनीयाः ।

3. सवितर्कनिर्वितर्कयोः को भेदः ?

4. यत्तन्निःषत्ताषत्तं निःखन्निरक्षदित्यादिभाष्यं भिन्नुक्तरीत्या सोपपत्तिं व्याख्यायताम् ।

5. भिन्नुमते परस्परप्रतिबिम्बः किमर्थमञ्जीक्रियते तदुच्यताम् ।

6. भोजराजेन सर्वषां दर्शनकाराणां मते मुक्तेः कीदृशं स्वरूपं प्रदर्शितम् ?

7. क्रियायोगः कः किं च तस्य प्रयोजनम् ?

8. 'वस्तुसाम्ये चित्तभेदात्तयोर्विविक्तः पन्याः' अस्य सूत्रस्य कीदृशं व्याख्यानं वार्तिककृद्भिः प्रदर्शितम् ?

9. परिणामाः कतिविधाः प्रदर्शितास्तदङ्गीकारस्य वा किम्प्रयोजनम् ?

10. सर्वभूतसत्त्वानां केनोपायेन भवति ?

SECOND HALF.

Examiner—BABU MURALIDHAR BANERJEE, M.A.

The figures in the margin indicate full marks.

1. Explain the fundamental metaphysical differences, if any, 9
between the Sankhya and the Yōga systems.

2. How does Iswara, according to Patanjali, differ from other   8
liberated souls ?

Or,

Does the conception of Iswara as formed by Patanjali involve any
self-contradiction ? How are the unlimited knowledge and power
of Iswara consistent with his being eternally liberated ?

3. How does Vyāsa show that sleep is one of the functions of   8
the mind ?   In what respect does Yōga differ from sleep ?

Or,

Explain the functions of the Purusha and Chitta involved in the
perception of an external object according to Bhōja and Vijnana
Bhukshu.   Does the consciousness of the object of perception belong
to, or reside in, the Purusha or the Chitta ?

4. Translate the following extract into English :—   25

स्यादेतदस्ति बाधकंऽनुभवोऽवयविनं व्यवस्थापयेत् । अस्ति
च बाधकं यत् सत् तत् सर्वमनवयवं यथा विज्ञानम्, सच्च गोघटादीति
स्वभावहेतुः । सत्त्वं हि विरुद्धधर्मसंसर्गीरहितत्वेन व्याप्तम्, तद्विरुद्धस्र
विरुद्धधर्मसंसर्गः   सावयव   उपलभ्यमानो   व्यापकविरुद्धोपलब्ध्या
सत्त्वमपि निवर्तयति । अस्ति चावयविनि तद्देशत्वातद्देशत्वावृतत्वाना-
वृतत्वरक्तत्वारक्तत्वचलत्वाचलत्वलत्त्वे विरुद्धधर्मसंसर्गे इत्याह – यथा
पुनरिति । अयमभिप्रायः - अनुभवसिद्धं सत्त्वं हेतुः क्रियते यत्किल
पांशुलपादुक्को द्वालिकोऽपि प्रतिपद्यते, अन्यत्र वाऽनुभवसिद्धात् ।
तत्रान्यत्सिद्धव्याप्तहेतुः । अनुभवसिद्धं तु घटादीनां सत्त्वमर्थक्रिया-
कारित्वरूपं न स्थूलादन्यत् । सांऽयं हेतुः स्थूलत्वमपाकुर्वन्नात्मानमेव
व्याहन्ति । ननु न स्थूलत्वमेव सत्त्वम्, अपि क्षतो व्यावृत्तिः ;
अस्थौल्यव्यावृत्तिस्र स्थौल्यम्, व्यावर्त्यभेदाच्च व्यावृत्तयो भिद्यन्ते, अतः
स्थौल्याभावेऽपि न सत्त्वव्याहतिः अन्यलात् । भवतु वा व्यावृत्तिमेदा-
दवसायविषयमेदः,   यत्पूर्वकाच्लवसायास्तस्यानुभवस्याविकल्यस्र
प्रमाणस्र का विषय इति निश्चपयतु भवान् । रूपपरमाणवो निरन्तरो-
त्पादा अग्रहीतपरमसूक्ष्मसत्त्वा इति चेत् । हन्तेते गर्भरसस्यर्शपरमाणु-
भिरन्तरिता न निरन्तराः । तस्मादन्तरालाग्रह एकघनवनप्रत्ययवत्
परमाणवालम्बनः सन्नयं विकल्पो मिथ्येति तत्प्रभवविकल्पा न
पारम्पर्येणापि वस्तुप्रतिबद्धा इति कुतस्तदवसितस्य सत्त्वस्यानवयवत्व-
साधकत्वम् । तस्मादविकल्पस्र प्रत्यक्षस्र प्रामाण्यमिच्छता तदनुभूय-
मानस्थौल्यस्रैव सत्त्वमविकल्पावसेयमकासेनाप्यभ्युपेयम् । तथा च
तद्वाधमानं   सत्त्वमात्मानमेवापबाधेत ।   परमसूक्ष्मः   परमाणवो
विजातीयपरमाणवनन्तरिता अनुभवविषया इति व्याहतमङ्गीकरणम् ।

SANSKRIT.

GROUP E.

EIGHTH PAPER.

FIRST HALF.

Examiner—PANDIT SIVAKUMAR TARKADARSANATIRTHA.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. अहंकारे निर्म्मूले जगतो निर्म्मूलत्वं वाशिष्ठरामायणोक्तं 15
युक्त्या व्यवस्थाप्यताम् । किन्तावत् वाशिष्ठसम्मतं जगतो मूलकारणम् ?
जगतः सत्यत्वं कथा युक्त्या निराकृतं वाशिष्ठे ? वीशिष्ठमते शशशृङ्गा-
दिवत् जगतोऽलोकत्वे तस्य कार्णवर्णनं कथं सङ्गच्छते ? मिथ्यात्वे
वा किन्तद् मिथ्यात्वम् ?

2. "शून्यमात्रं यथा व्योम स्यन्दमात्रं यथाऽनिलः । 15
जलमात्रं यथोम्मर्गादि सच्चिन्मात्रं यथा जगत् ॥"

इति वाशिष्ठवचनोक्तं जगतः सच्चिन्मात्रत्वं युक्त्या व्यव-
स्थाप्यताम् । जगतः सच्चिन्मात्रत्वे विज्ञानमात्रवादिबौद्धमताद्
वाशिष्ठमतस्य को विशेषः ?

3. अधोनिबद्धयोः "क, ख," चिह्नितप्रश्नयोः कस्यचिद्येकस्य 10
उत्तरं विधीयताम् ।

क । योऽसौ प्रसरति अर्थं सत्यभावान्न सा सती ।
असत् कथं प्रसरति वन्ध्यापुत्रः क नृत्यति ॥"
इत्युक्त्या कीदृशं तत्त्वं समर्थितं वाशिष्ठेन ?

ख । कति विधा देशा वर्णिता वाशिष्ठेन ? तत्र चातिवाहिक-
देहस्य किं स्वरूपं प्रश्रितम् ? तत्त्वं सप्रमाणसुपलभ्यताम् ।

4. अधोलिखितयोः "क, ख," चिह्नितप्रश्नयोः कस्यचिद्येकस्य
उत्तरं विधीयताम् ।

क । "निर्व्वाणे नास्ति दृश्यादि दृश्याग्रे नास्ति निर्व्वृतिः"
इत्युक्त्या निर्व्वाणस्य कीदृशं स्वरूपं प्रकटीकृतं वाशिष्ठेन ?

37

ख । वक्तृत्रोद्व्यनिर्देशपूर्व्वकं अधोलिखितपद्यानां यत्कि-
ञ्चित् द्वयं व्याख्याय तात्पर्य्यमुपवर्ण्यताम्, –

"मातृमेय प्रमाखादि देशकालौ दिगादि च ।
भावाभावविवर्त्तादि त्रिवपञ्चमयात्मकम् ॥ १ ॥"

"वेदनं यति संवेद्यो यगांदावेव वेद्यधृक् ।
नोत्पन्नो विद्यते नैश्च तस्मात् किं क्वैत्र वेदनम् ॥ २ ॥"

"स्वन्दात्मनि विकल्यांशे पतिता यत्यद्यपिणि ।
यस्मित् प्रसरति ध्रान्तौ तैलविन्दुरिवाम्भसि ॥ ३ ॥"

SECOND HALF.

Examiner—RAI RAJENDRACHANDRA SASTRI, BAHADUR, M.A.

Answer any FIVE *of the first six questions, and the seventh.*

1. Describe the four schools of Buddhist philosophy, dwelling   5
specially on the characteristic tenets of each school.

2. Discuss

."कार्य्यकारणभावात् वा स्वभावात् वा नियामकात् ।
अविनाभावनियमो दर्शनान्न न दर्शनात् ।"

3. Explain and illustrate :—   5

' परार्थानुमानवाक्यैकदेशोऽवयवः, स पञ्चविधः प्रतिज्ञा-
हेतूदाहरणोपनयनिगमनभेदात् ' ।

4. Discuss the various theories of '**मुक्ति**' mentioned in your text.   5

5. Sum up in your own language, in Sanskrit, the arguments in   5
support of the doctrine of **स्फोट**.

6. Give in your language, either in English or in Sanskrit, the   5
outlines of the Ramanuja School of Philosophy.

7. Translate into Sanskrit :—   25
"It may be sweet when on the great sea the winds trouble its
waters to behold from land another's deep distress; not that it
is a pleasure and delight that any should be afflicted, but because
it is sweet to see from what evils you are yourself exempt. It may
be sweet also to look upon the mighty struggles of war arrayed along
the plains without showing yourself in the danger. But nothing is
more sweet than to hold the lofty and serene positions, well fortified
by the learning of the wise, from which you may look down upon
others, and see them wandering all abroad, and going astray in their
search for the path of life ; see the contest among them of intellect,
of rivalry, of birth, the striving night and day with surpassing effort

to struggle up to the summit of power, and be masters of the world.
O miserable minds of men! Why will you not see that nature
craves for itself nothing more than that the man from whose body
pain holds aloof, should in mind enjoy a feeling of pleasure, exempt
from care and fear ?"

SANSKRIT.

GROUP G.

FIFTH PAPER.

FIRST HALF.

Examiner—MAHAMAHOPADHYAYA GURUCHARAN TARKADAR-
SANATIRTHA.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

पञ्चानामेवोत्तरं कार्य्यम् ।

1. षट्स्वास्तिकदर्शनेषु कस्य प्राधान्यं कया युक्तग्रा श्रीभन्नगो   15
रोचते ? तदध्ययनस्य च किं प्रयोजनम् ?

2. सर्व्वेषामास्तिकदर्शनिकानां कस्मिंश्चित् पदार्थे ऐकमत्यं   15
वर्त्तते न वा ? वर्त्तते चेत् स कः ? तत्र च किं प्रमाणम् ?

3. षड्षष्टिवर्त्तकार्य्यवादाः कीदृशाः ? तेषु च कंया युक्तग्रा को   15
वादः सांख्यानां सम्मतः ?

4. को योगः ? कतिविधश्च सः ? तथा को हेतुः किञ्च   15
प्रयोजनम् ?

5. योगभाष्यकारमते अन्तःकरणस्य कीदृशं परिमाणं ? तत्र च   15
भाष्यकृतसम्मता का युक्तिः ?

6. सांख्यपातञ्जलयोः परस्परं कस्मिन् मतभेदः ? तत्र च को   15
हेतुः ?

7. "तस्य हेतुरविद्या", "सुषुम्नाद्वारसांसिद्धं", मुक्तात्मनः   15
प्रशंसा उपास्यसिद्धस्य वा" सूत्राख्यितानि सोपपत्तिमं व्याख्यायन्ताम् ।

Second Half.

Examiner—Babu Pasupatinath Bhattacharyya, M.A.

Translate into English *any two* of the following passages :—   25

(1) कुत एष संप्रत्ययः, सुखादिभ्योऽन्यत्सद्वानस्तीति ? न हि सुखादिप्रत्याख्यानिन तथा स्वरूपमुपलभामहे । तस्माच्छ्रयविषायावरणो नास्ति । अथोच्यते, तेन विना कथ्य सुखादय इति ? न कथ्यचिदपीति वच्यामः । न हि यो य उपलभ्यते, तथ तथ सम्बन्धिना भवितव्यम् । यथ सम्बन्धोऽप्युपलभ्यते, सम्बन्धौ च, तथायं सम्बन्धीति गम्यते । न हि चन्द्रमसम् आदित्यं वोपलभ्य सम्बन्धान्वेषणा भवति कस्माय-मिति । न कथ्यचिदपीत्यवधार्यते । तस्मात्सु सुखादिभ्योऽन्यत्सद्वान-स्तीति । अथ उपलब्धस्य श्रव्यं कथ्यायितव्यः सम्बन्धौ भवति ; तत आत्मानमपि अनेन प्रकारेण उपलभ्य, कथ्यायमिति सम्बन्धान्तरम् अन्विष्येम ।

(2) इत्कुया आत्मानमुपलभामहे । कथमिति ? उपलब्धपूर्वे हि अभिप्रेते भवतीच्छा । यथा मेरुमुत्तरेण यानि अकाक्ज्ातौयैर-नुपलब्धपूर्व्वाणि स्वादूनि तृषफलानि, न तानि प्रति अस्माकम् इच्छा भवति । नो खल्वनेन पुरुषेण उपलब्धेऽपि विघये अन्यत्र उपलब्धुरिच्छा-भवति । भवति च अन्येद्युरुपलब्धे अन्येद्युरिच्छा । तेन उपलम्नेन समानकर्त्तृका सा इत्यवगच्छामः । यदि विज्ञानमात्रमेवेदम् उपलम्-कमभविष्यत्, प्रत्यते तस्मिन् कथ अपरेद्युरिच्छा अभविष्यत् ? अथ नु विज्ञानाइन्यो विज्ञाता नियः, तत एकस्मिन्नहनि य एव उपलब्धा अपरेद्युरपि स एव यस्मिष्यतीति । इतरथा हीच्छा नोपपन्ना स्यात् ।

(3) अथाप्यस्मिन्नर्थेन्राच्चथां भवति ; स वा अयमात्मेति प्रकृत्य आमनन्ति, अश्रौर्यो न हि श्रीर्य्यते इति, तथा, अविनाश्रौ वा अरे अयमात्मा अनुच्छित्तिधर्मा इति । विनश्वरं च विज्ञानम् । तस्माद् विनश्वरादन्यः स इत्यवगच्छामः । न च अकामेवमवगान्तुं – यथोप-लभ्यन्ते अर्थाः, न तथा भवन्तीति, यथा तु खलु नोपलभ्यन्ते तथा भवन्तीति । तथा हि सति, अश्रो नास्ति, अश्रस्य विघायमस्तीय-वगम्येत । न चाइस्मत्ययो व्यासोच इति अकाते वक्तुम्, बाधकप्रत्यया-भावात् । तस्माद् सुखादिभ्यो व्यतिरिक्तोऽस्ति । एवञ्चेद् स एव यच्चायुधौ इति व्यपदिश्यते ।

SANSKRIT.

GROUP G.

SIXTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—PANDIT KAMAKHYANATH TARKABAGISA.

1. "समानानेकधर्मोपपत्तेर्विप्रतिपत्तेरुपलब्ध्यनुपलब्ध्यव्यवस्था- 15
तश्च विशेषापेत्तो विमर्शः संशयः" इति सूत्रस्य केनांशेन कीदृशं संशय-
सामान्यलत्तणं? केन केनांशेन कीदृशानि संशयविशेषलत्तणानि च
वृत्तिकारेण व्यवस्थापितानि? तन्मते विशेषापेत्त इत्यस्य संशयलत्तण-
घटकत्वमस्ति न वा? नास्ति चेत् सूत्रे तन्निर्द्देशस्य किं फलं? भाष्य-
कारेण कया युक्तया तस्य लत्तणघटकत्वमुरीकृतं? का उपलब्ध्यव्यवस्था,
का चानुपलब्ध्यव्यवस्था? तयोः पृथक्कारणत्वं वृत्तिकारसम्मतं न वा?
न सम्मतञ्चेत् सूत्रे तदुल्लेखेन को विशेषः परिप्राप्तः? "उपलब्ध्य-
नुपलब्ध्यव्यवस्थातश्च" इत्यस्य भाष्यकारेण किं तात्पर्यमुपवर्णितं?
कीदृशम्वा उदाहरणद्वयं प्रदर्शितं? संशयसूत्रव्याख्याने भाष्यकारेण
सह वृत्तिकारस्य कुत्रचिन् मतभेदो वर्त्तते न वा? वर्त्तते चेत् को
मतभेदः? किं मतं कया युक्तया तुभ्यं रोचते?

2. वादलत्तणसूत्रे प्रमाणतर्कसाधनोपालम्भ इत्यस्य यथाश्रुतार्थ- 10
परत्वे उभयत्रापि प्रमाणतर्कवद्द्वावद्यावश्यकतया कोटिद्वयस्यापि
सिद्धिर्निष्प्रयूहा स्यात्, व्रतस्य कीदृशनिष्कृष्टार्थपरत्वं वक्तव्यं?
अवयवेषु प्रमाणतर्कान्तर्भावे पृथक्प्रमाणतर्कोल्लेखस्य किं फलमुक्तं
भाष्यकारेण? वादे पञ्चावयवोपपन्नत्वस्य ग्रायिकत्वं कया युक्तया
व्यवस्थापितं वृत्तिकारेण।

3. "साध्याद्यवयविनि सन्दिह्यः" इति सूत्रस्य यथाश्रुतार्थः 10
संगच्छते न वा? न सङ्गच्छते चेत् तत्र किं कार्यं? को वा
निष्कृष्टार्थः? अतिरिक्तावयविषाधने कीदृशी विप्रतिपत्तिर्वक्तव्या?

विप्रतिपन्नौ केषां विधिकोटि:, केषाम्वा निषेधकोटि: ? अतिरिक्त-
वयविषिद्धिप्रतिकूलपूर्वंपत्तनिरासार्यं कौदृक् सिद्धान्त: समाश्रणीय: ?

4. साधर्म्यसमाया वैधर्म्यसमायाश्च आतेर्लत्तणं तयोरसमुत्तरत्वे
वीजञ्च भाष्यकारोक्तवृत्तिकारोक्तरीत्या विश्रदीकृत्य प्रश्मनीयम् ।   8

5. "नियद्रव्यवृत्तयो ऽन्ता विशेषा:, ते च खल्वत्यन्तव्यावृत्ति-   8
ब्रुद्धिहेतुत्वाद् विशेषा एव विशेषा:" अनेन प्रश्तपादकृतभाष्यसन्दर्भेण
कौदृशं विशेषलत्तणं परिग्राह्यं ? विशेषा इति बहुवचननिर्देश्य किं
फलं ? ते चेत्यादिसन्दर्भेण कौदृश्यौ आश्रङ्का निराक्लता भवति ? उक्त-
सन्दर्भस्य किं कन्दलीकारसम्मतं व्याख्यानं ? परमसृत्तरिसाथे विशेष-
लत्तणं कथं नातिव्याप्तं ? विशेषपदार्थानङ्गीकारे का हानि: ? विशेषस्य
निर्दोषं लत्तणं किमपि कन्दलीकारेण प्रदर्शितं न वा ?

6. "अयुतसिद्धानामाधीय्याधारभूतानां य: सम्बन्ध इह   10
प्रत्ययहेतु: समवाय:" इति भाष्यसन्दर्भे अयुतसिद्धा इत्यस्य कोऽर्थ: ?
अनेन विशेषणेन आधाय्याधारभूतानामिति विशेषणेन च कस्य कस्य
व्यवच्छेद: ? उक्तभाष्यसन्दर्भेण कौदृशं समवायलत्तणं वक्तव्यं ? सम-
वायसाधने च किं प्रमाणं ? तत्प्रमाणञ्च स्वरूपेण कथं न सिद्ध-
साधनम् ?

7. प्रश्तपादेन य: सृष्टिसंहारक्रम: प्रदर्शित: या च आकाशानु-   8
मानप्रणाली प्रदर्शिता, कन्दलीकारोक्तरीत्या तयोस्तात्पर्यं विश्रदी-
कृत्योपवर्णनीयम् ।

8. शरीरेन्द्रियविषया येन सूत्रेण लत्तिता, वृत्तादीनां शरीरलं   6
घ्राणादीनाञ्च पार्थिवत्वादिकं येन येन सूत्रेण साधितं तानि तानि
सूत्राष्युद्धृत्य व्याख्यायानि ।

SECOND HALF.

Examiner—MAHAMAHOPADHYAYA DR. SATISCHANDRA
VIDYABHUSHANA, M.A., PH.D.

Translate *two* of the following extracts into Sanskrit :—   25

(a) *Manas* or mind is considered as *anu* or an atom, and the
question has been fully discussed how *manas* being *anu*, can be
united with *ātman*, which is *vibhu* or infinitely great. If, with the
Mimāṁsakas, it were admitted that the two could unite, then there
could never be any cessation of knowledge, such as we know, there
is in sleep ; for the union of *ātman* and *manas*, if once effected, would
be indissoluble. It is held by the Naiyāyikas that when *manas*

enters a particular region of the body called *purītat*, the effect of the union of *ātman* and *manas* is neutralised, and sleep ensues.

(*b*) Kauśika said to his friend : " Why do you look down upon the teachings of our Buddha so much ? The *Vaiśesika śāstra* is so defective that it is by no means to be compared with the teachings of Buddha. The *śāstra* cannot properly explain what an object is, and misunderstands causality." The friend asked him : " For what reason can you assert that the *Vaiśesika śāstra* does not properly explain causality ? The *śāstra* explains that broken potsherds are the cause of a pot." Kauśika answered : " If the *Vaśesika śāstra* really assert it, the assertion is nonsense. Broken potsherds are by no means the cause of a pot."

(*c*) In almost all the Hindu systems of philosophy, as these are classified by the most recent authorities, indications are to be found of a more or less developed analysis of the process or method of reasoning, and therefore of a certain amount of logical theory. In two systems in particular the logical element is the most prominent feature. The *Nyāya*, or the logical doctrine of Gotama, is in a very special sense the Hindu Logic, while in the *Vaiśesika*, or atomist system of Kaṇāda, there are many expansions of or additions to the *Nyāya*, though the prevailing interest is not logical.

SANSKRIT.

GROUP G.

SEVENTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—PANDIT SAKALNARAYAN SARMA.

(षड्वसु प्रश्नेषु कंचयोरेकतरंचैवोत्तरं देयम्) ।

1. भाष्यरीत्या व्याख्यायन्तामेतानि सूत्राणि ।   10

    (क) आन्तस्तद्धर्मोपदेशात् । कल्पनोपदेशाच्च मध्वादिवर-
विरोधः । अस्ति प्रतिज्ञोपरोधो यौगपद्यमन्यथा ।

    (ख) तत्तु समन्वयात् । ईक्षतर्नशब्दम् । आन्तत्त्व-
मसर्वज्ञता वा ।

2. (क) किं लक्षणं ब्रह्म ? तच्च किं प्रमाणकम् ? प्राणादिशब्दैः   10
कथ्य परामर्शः ? अध्यासशब्दस्य कोऽर्थः ? स सत्योऽसत्यो वा ? तत्र
का युक्तिः ?

(ख) जैनानां मते कीदृशः समभङ्गीनयः । तथा किं स्वद-
पसु ? कथं तस्य खण्डनं श्रीमन्ङाष्यकारैः कृतम् ?

3. निम्नलिखितो भाष्यांशः प्रकरणनिर्म्भश्रपूर्वकं सुस्पष्टं व्याख्येयः ।   10

    (क) "नन्विद्द जिज्ञासावैलक्षण्यमुक्तम् । कर्मकाण्डे भव्यो
धर्मो जिज्ञास्यः । इह तु भूतं नित्यनिर्वृत्तं ब्रह्म जिज्ञास्यम् " ।

    (ख) "रूपवेदनाविज्ञानसंज्ञासंस्कारसंचका:   पञ्चस्कन्धा:,
तेऽप्यध्यात्मं सर्व्वव्यवहाराख्यभावेन संचन्त्ये " ।

4. (क) ईश्वर-प्राप्ती को ? तत्र व्यष्टिसमष्टि कल्पना भवति न   10
वा ? ब्रह्मणः कथमुपादानत्वं निमित्तत्वञ्च ? कियदवयवकानि
लिङ्गशरीराणि ?

    (ख) कस्य पञ्चीकरणप्रकार: ? किं तत्र प्रमाणम् ? को
विश्ववैश्वानरो ?

5. (क) तत्त्वमसीति वाक्यस्य को विस्तृतोऽर्थ: ? तत्र लक्षणा   10
विद्यते न वा ?

    (ख) निर्विकल्पसमाधे: किं स्वरूपम्, तथा कान्यङ्गानि ? तेषां
किं प्रयोजनम् ?

6. (क) गीतायाः प्रत्यध्यायेषु योगशब्दोऽस्ति, तत्र व्याख-   10
मत्सर्घे: किं तात्पर्यम् । गीतायां निखिलतन्त्रसिद्धान्तसंग्रह, व्याख्येखिद्ध
वेशान्तसम्मतं किञ्जिद्दुर्क्कुद्धुसिद्धान्तप्रदर्शनमस्तीति विचारः कर्त्तव्यः ।

    (ख) गीतोपदेश्मो वैराग्योपपादनेन केवलं युद्धप्रवृत्तिकार-
कोऽण्वा परमपुरुषार्थसाधकः । व्यत्र स्वमतं सयुक्तिकं प्रकटी-
कारणीयम् ।

7. (क) सविस्तरं व्याख्यायन्तामेते श्लोकाः, —   15
        अव्यक्तादीनि भूतानि व्यक्तमध्यानि भारत ।
        अव्यक्तनिधनान्येव तत्र का परिदेवना ॥
        कर्मणो ह्यपि बोद्धव्यं बोद्धव्यञ्च विकर्मणः ।
        अकर्मणश्च बोद्धव्यं गहना कर्मणो गतिः ॥
        नैते सृती पार्थ जानन् योगी मुह्यति कश्चन ।
        तस्मात् सर्वेषु कालेषु योगयुक्तो भवार्जुन ॥

(ख) परं ब्रह्म परं धाम पवित्रं परमं भवान् ।
पुरुषं शाश्वतं दिव्यमादिदेवमजं विभुम् ॥
ऊर्ध्वमूलमधःशाखमश्वत्थं प्राहुरव्ययम् ।
छन्दांसि यस्य पर्णानि यस्तं वेद स वेदवित् ॥
श्रौ तत्त्वविति निर्द्वेश्रौ ब्रह्मशक्तिविधः स्मृतः ।
ब्राह्मणास्तेन वेदाश्च यज्ञाश्च विहिताः पुरा ॥
इति ।

SECOND HALF.

Examiner—MAHAMAHOPADHYAYA DR. GANGANATH JHA, M.A., D.LITT.

Translate the following into Sanskrit :—   25

A.

" If absorption into the Divine in after-life be the creed of some people, let them allow us many existences of individuality before this absorption; since one short-lived individuality seems to be too short a preparation for so mighty a union. There is an intimate connection between the human and the divine, and each individual will has a spiritual and eternal significance with relation to other individual wills, as well as to the Supreme and Eternal Will.' The righteous man has a constant feeling of spiritual harmony existing between ourselves and the outward visible universe, and of the actual Immanence of God in the infinitesimal atom as in the vastest system. If God were to withdraw himself for one single moment from this universe, everything would vanish into nothingness."

B.

" With true joy the stars perform their shining,
And the sea its moon,silvered roll;
For self-poised they live ; nor pine with noting
All the fever of some differing soul.
Bounded by themselves, and unregardful
In what state God's other works may be,
In their own tasks all their powers pouring,
These attain the mighty life you see."

SANSKRIT.

GROUP G.

EIGHTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

प्रथमार्धम् ।

FIRST HALF.

Examiner—DR. KUPPUSWAMY SASTRI.

Only SIX *questions must be answered*, *i.e.*, THREE *from each of the
two parts in the First Half.*

(A) PART I.

1. Elucidate the Mimaṁsaka's theories of **ज्ञानप्रामाण्य**. and **व्याप्ति-** 12½
ज्ञान, and discuss their epistemological adequacy and soundness.

Or,

Sketch succinctly the history of the *Mimaṁsādarsana,* drawing
attention to the distinctive features of the different Schools of Mī-
māṁsā.

2. (*a*) प्राभाकराभिमतं विध्यर्थं सयुक्तिकं विशदीकृत्य निरस्यत ।   12½

    (*b*) ' सर्वन्नैव हि वाक्यार्थो लच्च्य एवेति नः स्थितिः ' ।

    इति मीमांसकसिद्धान्तं स्फुटीकृत्य समर्थयत ।

3. नित्यकाम्ययोर्वैलच्च्यं संग्रहेण प्रदर्श्य समुचितहेतुभिरुप-   12½
पादयत ।

4. प्रकरणस्थानयोरारादुपकारकसन्निपत्योपकारकयोश्च   स्वरूपं   12½
बलाबलं च विवेचयत ।

5. (*a*) पञ्चमाध्यायस्यारम्भस्यौचितीं समर्थयत ।   12½

    (*b*) प्राप्तवाधाप्राप्तबाधयोः, नियमपरिसंख्ययोश्च भेदं सम्यक्
प्रतिपादयत ।

6. (*a*) संग्रहेण व्याख्यात ।   12½

      परप्रकरणस्थानामङ्ग श्रुत्यादिभिस्त्रिभिः ।

      यासे पुनश्च तैरेव संग्रहेन तद्विष्यते ॥

(b) उत्तराद्य समाधत्त ।

(1) ख्यानात्प्रबलमपि प्रकरणं कथं न विकृत्तो प्राकृताङ्गानि गृह्णीयात् ?

(2) जाग्रत्सु ' वैश्वदेवेन यजेत " इत्यादिषु कथं चतुर्धा नामधेय-निमित्तानां विभागः ।

<center>(A) PART II.</center>

1. " द्वा सुपर्णा सयुजा सखाया समानं वृक्षं परिषस्वजाते । 12½
तयोरन्यः पिप्पलं खाद्वत्त्यनश्नन्नन्योऽभिचाकशीति " इति वाक्यं
भाष्यकाराभिमतरीत्या व्याख्यायताम् ।

2. " यस्यामतं तस्य मतं मतं यस्य न वेद सः " । 12½
अत्रामतस्य मतत्वं मतस्यामतत्वं च कथं न विरुद्धम् ?

3. माण्डूक्योपनिषदि उपनिषदन्तरात् ब्रह्मस्वरूपनिरूपणे को 12½
विलक्षणः प्रकार आदृतः ?

4. कठवल्लुरुपाख्यानेन प्राथमिकेन कठोपनिषदः क उपयोगः ? 12½
उपनिषत्त्वस्याववयवार्थः कः ? ब्रह्मविद्यापरसुपनिषत्त्वमिति पक्षे
उपासनादिवाक्यानां कथमुपनिषत्त्वम् ?

5. शङ्करभगवत्पादसंमतं ब्रह्मस्वरूपं कीदृशम् ? नेह नानास्ति 12½
किंचनेति प्रपञ्चमिथ्यात्वं यद्दर्शितं तेनाद्वैतमतस्य क उपकारः ?
उपासनानां कर्मणां च केषां च नोपनिषदि प्रतिपाद्यमानानामद्वैतमते
किं प्रयोजनम् ?

6. प्राणो ब्रह्म कं ब्रह्म खं ब्रह्मेति वाक्ये ब्रह्मत्रितयं विव- 12½
क्षितम् ? उतैकम् ? आद्ये कथमद्वैतमतोपपत्तिः ? द्वितीये किमर्थं
पृथगुपदेशः ?

<center>द्वितीयार्धम् ।</center>

<center>SECOND HALF.</center>

Examiner—VEDANTABISARAD N. T. ANANTAKRISHNA SASTRI.

Translate into English :— 25

(1) न आत्माऽऽगन्तुकः कस्यचित्, स्वयं सिद्धत्वात् । न आत्म-त्मनः प्रमाणमपेक्ष्य सिद्ध्यति । तस्य हि प्रत्यर्थादप्रमाणान्यप्रसिद्ध-प्रमेयसिद्धय उपाददीयन्ते । न आकाशादयः पदार्थाः प्रमाणनिरपेक्षाः स्वयं सिद्धाः केनचिदभ्युपगम्यन्ते । आत्मा तु प्रमाणादिव्यवहाराश्रय-

खात् प्रागेव प्रमाणादिव्यवहारासिद्धरति । न चेदृग्ब निराकारबं
संभवति । श्रागन्तुकं षि वस्तु निराक्रियते, न खरूपम्, य एव
निराकर्ता तदेव तस्य खरूपम् । न श्रग्रेरोष्णर्मागुना निराक्रियते ।
तथाऽइमेतेदानीं जानामि वर्तमानं वस्तु, ब्रह्नमेवातीतमतीततरं
चाच्चासिषम्, ब्रह्नमेवानागतमनागतगततरं च चाक्षामीत्यतीतानागत
वर्तमानभावेनान्यथा भवत्यपि चातव्ये न ब्रह्नातुरन्यथा भावोऽस्ति,
सर्वदा वर्तमानत्वात् । यथा भक्तौभवत्यपि देषे नात्मन उच्छेदो
वर्तमानखभावत्वात् । ब्रन्यथाखभावत्वं वा न संभावयितुं प्रकाम् ।
एवमप्रत्याख्येयखभावत्वादेवाकार्यत्वमात्मनः, कार्यत्वं वाकाश्यस्य ।

(2)   नेवात्मनः प्रधुरयं निजलाभपूर्णो
       मानं जनादविद्रुघः करुणो दृशीते ।
       यद्वाञ्जलो भगवते विदधीत मानं
       तच्चात्मने प्रतिमुखस्य यथा मुखश्रीः ॥

(3)   ब्रह्नमर्घविनाश्यमेन्मोक्त इत्यध्यवस्यति ।
       ब्रपवर्पदसो मोक्तकथा प्रस्तावराम्बतः ॥

(4)   किं न तेन कृतं पापं चोरेणात्मापहारिणा ।
       योऽन्यथा सन्तमात्मानमन्यथा प्रतिपद्यते ॥

SANSKRIT.

GROUP I.

FIFTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Examiner—MAHAMAHOPADHYAYA DR. SATISCHANDRA VIDYA-
BHUSHANA, M.A., PH.D.

Full marks—70.

Answer any FIVE questions.

All the questions carry equal marks.

1. Translate *two* of the following extracts into English:—

(a)   निर्ऄत्त मञ्जरौकुड्मादपश्यत् पुरतस्ततः ।
       कन्ये नौलनिचोलखनौ च कंचिद्वादशोचने ॥

कर्णिकाएश्वरागाङ्गनाललीलायितस्पृशा ।
मनोद्धवलापाङे तनीयोङ्गनरेखया ॥
द्वारिनेत्राज्वलैमन्दमारुतान्दोलनाकुलैः ।
घनाघांघयुगे रूपपताकाएङ्घवैरिव ॥

(b) साप्सरा इव कान्ताभिः सनत्तत्रैव मन्त्रिभिः ।
सर्षिसंघैव विबुधैः सगन्धर्वैव गायनैः ॥
नित्यसंकेतवसतिर्धनङ्य यमस्य च ।
एकं विहरणारख्यं दानस्य च भयस्य च ॥
सपाख्यानस्थितिस्तस्य राच्नः शक्राधिकार्अयः ।
कस्य वाचस्तैवांचा वक्तुं कार्च्चन शक्यसे ॥

(c) वृक्षमनःपाणिपादैकाचारप्रचुरूचारिभिः ।
चरन्तं मख्खलैस्मिन्नेलंघुचित्रस्थिरक्रमैः ॥
स्रोचिल्यस्योचितां चर्यामलङ्गारसहङ्कृतेः ।
अभिमानविभूतीनां नित्योत्संकसनलयसु ॥
स्रलत्तिल्लित्ताप्रपातं स सर्वौप्युन्मुखा जनः ।
विचरन्तं तमैचिष्ट भित्तुमग्रे त्रिरोधिनासु ॥ ·

2. Explain *two* of the following extracts in Sanskrit, with reference
to their context, and adding notes where necessary :—

(a) पौतार्ब्चिर्लङ्गुतोर्वीभृत् कुम्भयोन्नरिवानयत् ।
तस्य प्रतापः प्रभवन् भुवनानि प्रश्रन्नतासु ॥
शुष्त्तमालपन्नाणि शौर्गालाह्रीदलानि च ।
तत्सेनार्णवतीराणि चक्रोरिस्त्रीमुखानि च ॥

(b) यावकाचारिणौ पादौ दधतीं कृच्छचारिणौ ।
स्तनच्छम्मुखं द्रष्टुं तपस्तन्तावित्वान्वहसु ॥
भास्वद्विम्बाधरां कृष्णकेशीं त्रितकराननात् ।
चुरिसध्यां त्रिवाकारां सर्वदेवमयीमिव ॥

(c) न कस्यपेनोपकृतं न यत् संकर्षणेन वा ।
वैलया सख्खलेऽसुर्षांसत् सुय्येन सुकर्मेणा ॥
भुमेर्जलादुह्रगं द्विञ्चते न तजापेणसु ।
त्रैतुबन्धोप्रमभिस्तोये यमनं कालियस्य च ॥

चतुर्थं लिङ्गमिति यद्दिषाोः षत्कर्मे जन्मषु ।
मुय्यख तल्ल्य्यराषेरेकलिङ्गेव जन्मनि ॥

3. (a) Explain the term "Dāmara"; describe the part played by the Dāmaras in the history of Kasmir from the beginning of the twelfth century till the date of the completion of Kalhana's chronicle.

(b) Trace the origin of the Karkota Dynasty and state the extent of Lalitāditya's power with reference to the nations conquered by him.

4. (a) Discuss Mons. Troyer's theory as regards the authorship of the Rājatarangiṇī.

(b) Give an estimate of Kalhaṇa's character as a historian.

5. State the principal events in the reign of Samgrāmarāja and discuss the date of Toramāṇa, Lalhkhaṇa Narendrāditya and Cippaṭa Jayāpīḍa Bṛhaspati.

6. Write notes on any *seven* of the following:—
Purāṇādhiṣṭhāna, Lohara, the Bhautta land, Diddāmatha, Maḍavarājya, Khaśa, Khāri, Mummuni, Bilhaṇa, Pādāgra, Dvārapati, Rājānaka and Adhikaraṇa lekhaka.

7. What do you know of the last Hindu sovereign of Kasmir ? When and how was the valley annexed to the Mogul Empire ? Write all that you know about the political influence of the Tibetans in Kasmir.

SECOND HALF.

Examiner—PANDIT NIRANJAN PRASAD CHAKRABARTI, M.A.

Full marks—30.

1. Translate any *two* of the following passages into English:—

(a) अथ तत् श्रुत्वा जातोद्वेग इव भदन्तः पुनरभ्यधात् "धीमन् न खलु कश्चिदेवंरूपो वृत्तान्तोऽस्मानभ्युपगतवान् अभाजनं हि वयमीदृशानां प्रिया- ख्यानोपायनानां भवताम्" इत्येवं भाषमाण एव तस्मिन् अक्लाडागत्यापरः श्रमिनि वयसि वर्त्तमानः सम्भ्रान्तरूप इव पुरस्तादुपरचिताञ्जलिज्ञांतकरणः प्रत्तरितचत्तुरभाषत—"भगवन् भदन्त महत्कर्षं वर्त्तसे । बालैव बलवद्व्य- सनाभिभूता भूतपूर्वापि कल्याणरूपा स्वीशोकावेशविवशा वेश्मानं विशति । सम्भावयतु तामर्पिाशतप्राणां भगवान् । अभ्युपपद्यतां समुचितेः समाश्वासनेः । अनुपरतपूर्वं क्रिमिकीटमपि दुःखितं दयाराशेरार्य्यस्य गोचरगतमि"ति ।

(b) राजपुरुषैरिधिष्ठितस्त गत्वा स्वधाम धूमसयानिव कृताश्रुपातान्, अग्रिमयानिव जनितहृदयदाहान्, विषमयानिव दत्तमूर्छावेगान्, मह्रा- पातकमयानिव उत्पादितधृणान्, क्षारमयानिव ग्लानीतवेश्नान् कतिचित् कमलानप्रह्लात् । आचमंश्च चामरग्राहिणमादिदेश विच्चायागच्छ कथमास्ति तात इति । गत्वा च प्रतिनिवृत्य च एव तथेवेति विच्चापितस्तेन अगृहीत-

ताम्बूल एव उत्ताम्यतामनसा ग्रस्ताभिलाषिणि सवितरि सर्वानाच्छयोपद्धरे
वेद्याः ! किमस्मिन्नेवंविधे त्रिधेयमधुनेति विषम्बच्छृदयः पप्रच्छ । से तु
व्याहापयन् एव धैर्य्यमवलम्बस्य कतिपयैरेव वीसरैः पुनः स्वां प्रकृतिमापन्नं
स्वस्यं श्रोष्यसि पितरमिति ।

(c) स्वस्ति नन्वीपुरतो गुर्ज्जरनरपतिवंशमद्वोर्घौ श्रीषड्जन्या विमल-
यशोदीधितिनिकरविनिष्ठतकलितिमिरनिचयः सामन्तद्वृः । यत्रोपमीयते
श्रिश्रिनि सोमल्वेमल्यश्रोभाकलाभिः, न कलङ्केन । श्रौनिक्षेत्रश्रोभासमुदय,
धिक्कुनकुलकण्टकतया कमलाकरे, न पङ्कजन्मतया; सत्त्वोत्साहविक्रमै-
र्ङ्गाधिराजे न क्रूराश्रयतया; लावण्यस्यैर्य्यगाम्भीर्य्यस्थित्यनुपालनतया
मद्वोर्घौ न व्यालाश्रयतया ; षत्कठषसुन्नुतविद्याधरावासतया हिमाचले,
न खश्रपरिवारतया । यत्र च सम्भोगः शेषोन्सयेव विमलकिरणमणि-
प्रताविष्कृतगौरवः सकलजगत्साधारणः । यत्र प्रकाश्यते सत्कुलं श्रीलेन-
प्रभुत्वमान्त्रया, ग्रस्तमरातिप्रणिपातेन, कोपो निग्रहेण, प्रसादः प्रदानैः धर्मो
देवद्विजातिगुरुजनसपर्ययेति ।

(d) तत्र च प्रथममस्य चेतोद्वारिभिर्मच्छ्रांत्रैर्गर्भकारतामनीयन्त दश
दिशः ततो जलधरैः । अग्रतः समुत्प्लुतेन चेतसा काप्यगम्यत, पृष्ठतो हंसैः ।
पूर्वं तुलितनीलोत्सलवद्वकान्ति नयनयुगलमस्य सलिलं समुत्ससर्ज, चरम-
मम्मोमुचां वृन्दम् । वर्षजललुलितैः कमलाकारैरेव सद्व ममज्ज काश्म्वरी-
समागमप्रत्याश्रा । धारारयासद्वैः कन्दलैरेव सद्वाभिद्यात हृदयम् । ततश्च
वितनेन स्थलीषु, कलकलेनाम्बुषु, पटुनापर्वततटेषु, उल्लखेन तालीवनेषु,
यथाधारापतनमाक्षर्य्यमानेन धारारवेणोत्कलिकाकर्लितो न रात्रौ न दिवा
न ग्रामे नारख्ये क्वचिद्विशपि न कुचिद्रपि निर्वृतिमेवाध्यगच्छत् । अनधिगत-
निर्वृतिष्य धौरख्यभावोऽपि प्रकृतिमेवोससर्ज । स्राविततषकलधरातस्तैर्धाराज-
लैरप्यशोष्यत । द्योतितदश्रदिश्रा ग्रतहृशलोकेनापि मूर्छान्धकारैऽत्तिप्यत ।

(e) यास्ते च दिनमये ग्रस्तगिरिशिखरगैरिकतटवाधारयाच्छायसेङ्गवि
ग्रन्तरिसाख्येन ग्रङ्कुरश्रगैरेण संघट्टायाः सम्ध्याङ्गनायाः रक्तचन्दनचर्चितेक-
स्तनकलयश्रश्रनौये दिनाधिनापे जनाधिनापः स ग्राग्य जनस्याय धरणि-
न्यसंचरणनखकिरणच्छादितकिरीटः कृताञ्जलिरतिष्ठत् । स्रादिष्टश्च "दिष्ट्या-

विष्टुविद्धि इव जगति हि न निरौहरेहिनं प्रियः संब्रियते । प्रेयांवि च
सकलानि प्रनखसानं इस्ते नियसन्निष्यानि यतस्ते सघीयसा सब्वरितेन
प्रनाकलितकलडुंन प्रर्विसेन श्रीकृष्टचेषसा जनेन प्रनेन सरस्तया षंकृतं यया
इव तेऽग्रविद्धिः स्यात् । तदेतस्या निश्चि गाहनीयं गाहनान्तरज्ञ सलिलतले
सततगतीद्र प्रन्तःषज्ञारिणः सन्निधृष्ठ यथाशक्ति श्रय्या कार्यो ।

SANSKRIT.

GROUP I.

SIXTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

. *Examiner*—DR. D. R. BHANDARKAR, M.A.

Full marks—50.

Any THREE *questions may be attempted.*

1. What are the constituent qualities of Aśoka's dhaṁma and how
was it to be shown, in practice according to him ? What practical
hints does he give in order that an individual may develop dhaṁma in
himself ?

2. What light do Aśoka's inscriptions 'throw on the administration of
the period ?

3. Determine the extent of Aśoka's dominions from external and
internal sources.

4 What do you know about Aśoka as (1) a private individual and
(2) as a ruler ?

5. Explain the following with reference to context, giving the various
interpretations put upon them :—

(*a*) Ya cha kiṁchi mukhato āñapayāmi svayaṁ dāpakaṁ vā srāvā-
pakaṁ vā ya vā puna mahāmātresu āchāyika āropitaṁ bhavati tāya
athāya vivādo nijhatī vā saṁto parisāyaṁ ānaṁtaraṁ pativedetavyaṁ
me sarvatra sarvekāle.

(*b*) So devānaṁ piyo Piyadasi rājā dasavasābhisito saṁto ayāya
saṁbodhiṁ.

(*c*) Iminā chu kālena amisā samānā munisā Jaṁbudīpasi misā
devehi.

SECOND HALF.

Examiner—BABU SURENDRANATH MAJUMDAR, M.A.

Full marks—50.

N.B.—*Attempt Question 6 and any two.*

6. (*a*) Transcribe the following extract in Devanāgari, Roman or Bengali :— 20

[extract in Brāhmī script]

(*b*) *Either.*

Trace the development of modern Bengali *k, m, y,* and *ś* from the Brāhmī Alphabet.

Or,

Write notes on *any four* : (i) the Drāviḍī of Bhaṭṭiprolu, (ii) Bower MS. Script, (iii) Kuṭila, (iv) Arrowhead, and (v) Vaṭṭeluṭṭu alphabets.

7. Transcribe and translate into English :— 15

(*c*) *[text in Brāhmī / arrowhead script]*

(*d*) *[text in Brāhmī / arrowhead script]*

38

8. (a) Translate into Sanskrit :— 15

Vidite ve bhaṁte āvatake hamā Budhasi dhaṁmasi saṁghasi galave ca pasāde ca. E keṁ ci vagavatā Budhena bhāsite save se subhāsite vā.

(b) Explain the system of numerical notation used in the 'minor rock edict' of Aśoka.

9. Write notes on any *five : Nagarariyohālakā, phāsuvihālatā,* 15 *suve suve, samōdāpayitave, niṁsidhiyā, caghaṁtī.*

10. (a) Give a summary of the Kalinga edicts. 15

(b) Transcribe in Aśoka Brāhmī :—

Iyaṁ dhaṁmalipi ata athi silāthaṁbhāni vā silāphalakāni vā tata kaṭaviyā.

SANSKRIT.

GROUP J.

SEVENTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Examiner—DR. D. R. BHANDARKAR, M.A.

Full marks—50.

Any THREE *questions may be attempted.*

1. (a) What are the dates specified in the Mandasor inscription of Kumāragupta and Bandhuvarman ? To what era do they belong ?

(b) State all you know about the nomenclature of this era.

2. Translate the following stanzas and explain fully their historical significance :—

(a) Pitari divam=upete viplutāṁ vaṁśa-lakshmīm bhuja-bala-
vijitārir=yyaḥ pratisthāpya bhūyaḥ [|]
jitam= iti paritosān=mātaraṁ sāsranettrāṁ hata-ripur=iva
Krishṇo Devakīm=abhyupetaḥ [||]

(b) Sthāṇor=anyattra yena praṇati-kṛipaṇatāṁ prāpitaṁ n=
ottamāṅgaṁ
yasy=āślishto bhujābhyāṁ vahati Himagirir=durgga-śabd-
ābhimānaṁ |
nichais=ten=api yasya praṇati-bhujabal-āvarjjana-klishṭa-
mūrddhnā
chūḍā-pushp-opahārair = Mmihirakula-nṛipeṅ = ārchchitaṁ
pāda-yugmaṁ ||

3. Give a summary of the contents of the Junagarh rock inscription of Skandagupta.

4. What do you gather about the social, religious and economic life of ancient India during the Gupta period ?

5. Specify what tribes are mentioned and in what connection in the Allahabad pillar inscription of Samudragupta. Identify them as far as possible.

SECOND HALF.

Examiner—BABU SURENDRANATH MAJUMDAR, M.A.

Full marks—50.

Attempt Question 6 and any TWO.

6. Transcribe the following extracts in Devanagari, Bengali or 18 Roman, and translate either of them into English :—

7. Translate into English *any four* :— 16

(a)
राजानो युधि दुष्टवाजिन इव श्रीदेवगुप्ताश्रयः
कृत्वा येन कशापघारत्रिमुखाः सर्व्वं समं संयताः ।
उत्खाय द्विषतो विजित्य वसुधां कृत्वा प्रजानां प्रियं
प्राणानुज्झितवानरातिभवने यस्यानुरोधेन यः ॥

(b)
न्यक्कारेण पितुः प्रियं कलत्रमित्रान्वयात् कर्षता
येनैकेन हि तूवरेण करिणा षष्टिर्जिता दन्तिनाम् ।
तं च ब्रह्मचतुष्पतिं गजघटावष्टब्धसेनं हठात्
येनास्त्रेरपि कोवलैर्भुजबलता निर्जित्य राज्यं धृतम् ॥

(c) या जायाजायनाजातश्त्रोस्त्य मद्गीभुजः ।
भीमसेनार्जुनोपास्यश्रीभूषबश्रालिनः ॥

(d) शूरंमन्य इवासि नान्न किमिह खं राघव श्राघसे
स्वर्धां वर्धन मुञ्ज वीर विरतो नाद्यापि सर्पस्सव ।
इत्यनोन्यमर्द्दनिश्प्रणयिभिः कोलाहलैः स्वाभुजां
यत्कारागृहयासिकेनियमितो निद्रापनोदक्षमः ॥

(e) जैश्वत्वात् प्रसून्ति खड्ग द्वितीयद्वाङ्गुरेव समस्तपरगजघटास्फोटन-
प्रकाश्रितसत्त्वनिकघस्त्रतुप्रभावप्रणताग्रतिचूड़ारत्नप्रभासंसक्तपादनखर-
श्रिमसंद्गतिः यः लक्ष्मितप्रणीतमारीसम्यक्प्रिपालनप्रज्ञाद्गुरयरज्जुनान्वर्थ-
राजश्रब्दः पाद्वारौव सकलभुवनमण्डलाभोगप्रमोरः श्रीगुह्नसेनः ।

8. (a) Explain fully the historical allusions in ślokas (a), (b)   16
and (c).
(b) Point out the peculiarities of the alphabet of the Deopara
inscription.
9. (a) Write notes on : —   16
Mahākṣapaṭalika, Sotpadyamānaviṣṭika, Māḍavika, Sadaśāparā-
dha, Divira, Rahasādhikata.
(b) Explain the historical importance, and give the substance,
of the Aihole inscription.
10. Give a brief account of the Rāṣṭrakutas and of the kings of   16
Valabhi.

SANSKRIT.

GROUP I.

EIGHTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Examiner—HON'BLE SIR ASUTOSH MUKHERJEE, KT., C.S.I.,
M.A., D.L.

Full marks—50.

N.B.—*Answer any* THREE *of the following questions.*

All the questions carry equal marks.

1. Give a complete history of the kingdom of the Gāndhāra, noticing
specially the following points :—(a) the geographical limits of the king-
dom, (b) the races that exercised political influence in it, (c) its chief
towns and what they were noted for, and (d) an account of it as left by
Hwen-thsang.

2. Write historical and geographical notes on the following :—
Jālandhara, Bukephala, Sākala, Balabhi, Bharoch, Kurukṣetra, Srughna and Sankisa.

3. Give a brief account of the following kingdoms :—
Kanoj, Kosāmbi, Vaisāli, Pauṇḍravardhana, Malwa, Samataṭa and Tāmra-lipti.

4. Draw a map of Southern India, locating all the kingdoms visited there by Hwen-thsang. Give some account of each of the kingdoms.

5. Give concise accounts of three of the following :—

(a) The temple of Sun at Multan as seen by Hwen-thsang and other foreign travellers.

(b) Māyāpura at Haridwar as described by Hwen-thsang.

(c) Akṣaya-vaṭa at Prayāga as noticed by Hwen-thsang and other foreign writers.

(d) The Lumbini garden as visited by Fa-hian and Hwen-thsang.

(e) The Kukkutapāda vihāra as visited by Fa-hian and Hwen-thsang.

SECOND HALF.

Examiner—MAHAMAHOPADHYAYA DR. SATISHCHANDRA VIDYA-BHUSHANA, M.A., PH.D.

Full marks—50.

Translate into Sanskrit any two of the following extracts :—

(a) When the child Koklā was growing up, he ordered that the old custom of his people should be disregarded, and that the little princess should be, not reared on vegetable food, but nourished also with flesh-meat every day. Her education was entrusted to the ancient nurse who had accompanied her from Srikot, and who was quite devoted to her. No other woman but herself was allowed to attend her, and no other woman but herself was permitted to enter the walls of the fortress.

(b) Then said Srikap to Rasālu, "Wherefore have you come to me ?" "It is reported," answered he. "that you are a tyrant, a man of blood, delighting in the slaughter of thousands of innocent men. Therefore have I come to your castle to challenge you to combat." "Be it so," replied Srikap. "Everything shall of course be ordered as you desire." Then said he again, "For you and me to fight together in public would be anything but creditable."

(c) So the king saw us yesterday from a distance, while we were debating about a place to dwell in, and how we should subsist. And your majesty, seeing us, had us brought and thrown into prison on the suspicion of being thieves, and to-day we have been questioned about our history, and I have just told it : now it is for your highness to dispose of us at pleasure." When one of them had said this, the king Vikrama-simha said to these two Brāhmans,—"I am satisfied, do not be afraid, remain in this city, and I will give you abundance of wealth."

(d) Once on a time there was a king named Mahāsena, and he was attacked by another king far superior to him in power. Then the king's ministers met together. and in order to prevent the ruin of his interests, Mahāsena was persuaded by them to pay tribute to that enemy. And after he had paid tribute, that haughty king was exceedingly afflicted, thinking to himself, "Why have I made submission to my enemy ?"

(e) "Hear what happened to Nanda after you had left him. Sakatāla after waiting for it a long time, found that he had now obtained

an opportunity of injuring him. While thinking how he might by some device get Yogananda killed, he happened to see a Brāhman named Chānakya digging up the earth in his path ; he said to him, " Why are you digging up the earth ? " The Brāhman, whom he had asked, said, " I am rooting up a plant of *darbhá* grass here, because it has pricked my foot."

PALI.

FIRST PAPER.

Examiner—BABU SAILENDRANATH MITRA, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. " That the Atītavathu is the oldest part of the Jātaka may   9
be clearly seen from the language of the Pali verses." Illustrate this statement from your text.

2. Give *in your own Pali* the story of the *Gangamāla-jātaka or* of   6
the *Kanhadīpāyana-jātaka.*

3. " In many instances gāthās in the Theragāthā uttered at   6
different times and on different occasions are incoherently put together." Illustrate.
                         Or,

Write a short note on the Therīgāthā under the following heads :—   6
(a) canonical tradition, (b) historical significance, (c) relation between teacher and disciple.

4. Translate *any two* of the following extracts into English :—   8

    (a) Dumavhayāya uppanno jāto pandaraketunā
       ketuhā ketunā ye va mahāketuṁ padhaṁsayi.
       Cutā patanti patitā giddhā ca punarāgatā
       katam kiccaṁ· rataṁ rammaṁ sukhen' anvāgataṁ sukhaṁ

    (b) Sukhaṁ supanti munayo ye itthīsu na bajjhare
       sadā ve rakkhitabbāsu yāsu saccaṁ sudullabhaṁ.
       Vadhaṁ carimhā te kāma ananā dāni te mayaṁ,
       gacchāma dāni nibbānaṁ yattha gantvā na socati.

    (c) Na nūnâyaṁ paramahitānukampino rahogato anuviganeti
         sāsanam ;
       tathā h'ayaṁ viharati pākatindriyo migī yathā taruṇajātikā
         vane.
       Nagā nagaggesu susaṁviruḷhā udaggameghena navena sittā
       vivekakāmassa araññasaññino janeti bhiyyo Usabhassa
       kalyataṁ.

5. Translate the following extracts into English, adding explana-   10
tory notes on the words italicized :—

    (a) Cātuddasī pañcadasī yā ca pakkhassa aṭṭhamī
       pāṭihārikapakkhañ ca *aṭṭhanga*susamāgataṁ
       uposatham upagacchiṁ devakāyābhinandinī.

    (b) Yam tam isīhi pattabbaṁ thānaṁ durabhisambhavaṁ
       na taṁ *dvaṅyulipaññāya* sakkā pappotum itthiyā

(c) Māyaṁ viya aggato kataṁ supinante va suvaṇṇapādapaṁ
upadhāvasi andha rittakaṁ janamajjhe-r-iva rupparūpakaṁ.
Vattani-r-iva kotar'ohītā majjhebubbulakā saassukā
pīḷikoḷikā c'ettha jñyati vividhā cakkhuvidhā'va piṇḍitā.

6. Write short biographical notes on—   8
    (a) *any two* of the following:—Gosāla, Hārita, Uttiya, Vappa
        and Vacchapāla ;
    (b) *any two* of the following :—Muttā, Visākhā, Vaḍḍhamātā
        Kisāgotamī and Subhā (kammāradhītā).

7 Discuss briefly the date of the composition of the Sumaṅgala-   4
vilāsinī.

8. (a) Write all that you know about the Six Unbelievers referred 10
to in the Sāmaññaphalasutta.

    (b) Summarize *in your own Pali* what has been said in answer   5
to the following question in the Mahāsatipaṭṭhānasuttanta :—
" *Kathañ ca bhikkhave bhikkhu kāye kāyānupassī viharati* ? "

9. Translate into English *any two* of the following extracts:—   12
    (a) Tayidaṁ bhikkhave Tathāgato pajānāti : "Ime ditthit-
thānā evaṁ-gahitā evaṁ-parāmatthā evaṁ-gatikā bhavissanti evaṁ-
abhisamparāyā ti." Tañ ca Tathāgato pajānāti, tato ca uttaritaraṁ
pajānāti, tañ ca pajānanaṁ na parāmasati, aparāmasato c'assa
paccattaṁ yeva nibbuti viditā, vedanānaṁ samudayañ ca atthaga-
mañ ca assādañ ca ādīnavañ ca nissaraṇañ ca yathābhūtaṁ viditvā
anupādā vimutto bhikkhave, Tathāgato.
    (b) Yathā vā pan' eke bhonto samaṇa-brāhmaṇā saddhādeyyāni
bhojanāni bhuñjitvā te evarūpaṁ jūtapamādaṭṭhānânuyogam anu-
yuttā viharanti—seyyathidam aṭṭhapadaṁ dasapadam ākāsaṁ pari-
hārapathaṁ santikaṁ khalikaṁ ghaṭikaṁ salākahatthaṁ akkhaṁ
paṅgacīraṁ vaṅkakaṁ mokkhacikaṁ ciṅgulikaṁ pattāḷhakaṁ
rathakaṁ dhanukam akkharikaṁ manesikaṁ yathāvajjam—iti vā
iti evarūpā jūtapamādaṭṭhānânuyogā paṭivirato Samaṇo Gotamo ti.
    (c) So anekavihitaṁ iddhividhaṁ paccanubhoti—eko pi hutvā
bahudhā hoti, bahudhā pi hutvā eko hoti, āvibhāvaṁ tirobhāvaṁ
tirokuḍḍaṁ tiropākāraṁ tiropabbataṁ asajjamāno gacchati
seyyathā pi ākāse, pathavīyā pi ummujja-nimmujjaṁ karoti sey-
yathā pi udake, udake pi abhijjamāno gacchati seyyathā pi pathavī-
yaṁ, ākāse pi pallaṅkena kamati seyyahā pi pakkhī sakuno, ime pi
candima-suriye evaṁ mahiddhike evaṁ mahānubhāvo pāninā pari-
masati parimajjati, yāva Brahmalokā pi kāyena va saṁvatteti.

10. Translate into English the following extracts, commenting on 9
the words italicized :—
    (a) Sujīvam ahirīkena *kākasūrena* dhaṁsinā
        pakkhandinā pagabbhena saṁkiliṭṭhena jīvitaṁ.
    (b) Yassa c'etaṁ samucchinnaṁ mūla*ghaccaṁ* samūhataṁ
        sa ve divā vā rattiṁ vā samādhim adhigacchati.
    (c) Ākāse ca padaṁ n'atthi samaṇo n'atthi bāhiro *papañcā-*
        bhiratā pajā nippapañcā Tathāgatā.

11. Give *in your own Pali* a summary of the Jarāvagga *or* the 5
Nirayavagga of the Dhammapada.

12. Explain *any four* of the following terms ;—*āsaṁso, gūthabhāṇī,* 8
dvicakkhu, ucchaṅgapañño, ārogyamado and *vidhūro.*

PALI.

SECOND PAPER.

Examiner—MAHAMAHOPADHYAYA DR. SATISCHANDRA VIDYA-
BHUSHAN, M.A., PH.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Full marks—50.

Answer any THREE *of the following questions.*

All the questions carry equal marks.

1. Translate the following into English :—

(*a*) Yā tesaṁ dhammānaṁ aññātānaṁ adhitthānaṁ apattānaṁ
aviditānaṁ asacchikatānaṁ sacchikiriyāya paññā pajānanā vicayo pavi-
cayo dhammavicayo sallakkhaṇā upalakkhaṇā paccupalakkhaṇā paṇḍic-
caṁ kosallaṁ nepuññaṁ vebhavyā cintā upaparikkhā bhūrī medhā pari-
ṇāyikā vipassanā saṁpajaññaṁ patodo paññā paññindriyaṁ paññā-
balaṁ paññāsatthaṁ paññā-pāsādo paññā-āloko paññā-obhāso paññā-
pajjoto paññā-ratanaṁ amoho dhammavicayo sammādiṭṭhi dhamma-
vicaya-sambojjhaṅgo maggaṅgaṁ maggapariyāpannaṁ—idaṁ tasmiṁ
samaye aññā taññassāmītindriyaṁ hoti.

(*b*) Katamā diṭṭhisaṁsandanā pucchā ? Pakatiyā lakkhaṇaṁ
ñātaṁ hoti diṭṭhaṁ tulitaṁ tīritaṁ vibhūtaṁ vibhāvitaṁ. So taṁ aññehi
paṇḍitehi saddhiṁ saṁsandanatthāya pañhaṁ pucchati Ayaṁ diṭ-
thisaṁsandanā pucchā. Katamā vimaticchedanā pucchā ? Pakatiyā
saṁsaya-pakkhanto hoti vimati-pakkhanto dveḷhakajāto. Evannu kho
na nu kho kinnu kho kathan nu kho ti so vimaticchedanatthāya pañhaṁ
pucchati Ayaṁ vimaticchedanā pucchā.

(*c*) So diṭṭhi saṁkappa-vāyāma-satisamādhi-vasena pañcavidho hoti.
Ayaṁ pañcavidho pi manokammaṁ nāma. Evaṁ lokuttaramaggo
bhajāpiyamāno tīṇi kammāni bhajati. Imasmiṁ ṭhāne dvāra-saṁsa-da-
naṁ nāma hoti. Kāya-vacīdvāresu hi copanaṁ patvā kamma-pathaṁ
appattaṁ pi atthi, mano-dvāre samudācāraṁ patvā kammapathaṁ
appattaṁ atthi. Taṁ gahetvā taṁ taṁ dvārapakkhikaṁ eva akaṁsu.
Tatrāyaṁ nayo.

2   Give the legendary as well as the historical account of the com-
position of the Dhammasaṅgaṇi What is the probable date of its com-
position ? Mention the principal characteristics of Dhammasaṅgaṇi as
a metaphysical work.

3. Explain the following terms :—

Appaṇā cattāro satipatthānā. ārammana, atireka-cīvarā, saṁkilesā,
bojjhaṅga, yebhuyya-vuttitā, abbohārikā, dukkaṭāpatti, catubhūmaka-
phassa, and pañcasaṁvara-dvāra.

4. Where and when was the Atthasālinī composed ? Write all that
you know about Mahā-atthakathā. Name some of the Brāhmanic books
and legends mentioned in the Atthasālinī. In what connections have
they been mentioned ?

5. Give in simple Pali the substance of what is stated in the Atthasālinī about "kāya-kamma-dvāra-katha." How is "cakkhuviññāṇa" produced according to the Dhammasaṅgaṇi? What are the chief features of "kusalā dhammā"?

SECOND HALF.

Full marks—50.

Answer any THREE *of the following questions.*

All the questions carry equal marks.

1. Translate the following into English :—

(a) Tathā hi sekho abhigijjhanto asamuppannañca kilesaṁ uppādeti uppannañca kilesaṁ phātikaroti. Yo pana anāvilasaṁkappo anabhigijjhanto vāyamati, so anuppannānaṁ pāpakānaṁ akusalānaṁ dhammānaṁ anuppādāya chandaṁ janeti vāyamati viriyaṁ ārabhati cittaṁ pagganhāti padahati, so anuppannānaṁ pāpakānaṁ akusalānaṁ dhammānaṁ pahānāya chandaṁ janeti vāyamati♦viriyaṁ ārabhati cittaṁ pagganhāti padahati, so anuppannānaṁ kusalānaṁ dhammānaṁ uppādāya chandaṁ janeti vāyamati viriyaṁ ārabhati cittaṁ pagganhāti padahati. So uppannānaṁ kusalānaṁ dhammānaṁ thitiyā asammosāya bhiyyo-bhāvāya vepullāya bhāvanāya pāripuriyā chandaṁ janeti vāyāmati viriyaṁ ārabhati cittaṁ pagganhāti padahati.

(b) Dve dhammā sādhāraṇā: nāmasādhāraṇā vatthusādhāraṇā ca, yaṁ vā pana kiñci aññaṁ pi evaṁjātiyaṁ. Micchattaniyatānaṁ sattānaṁ aniyatānañca sattānaṁ dassanapahātabbā kilesā sādhāraṇā. Puthujjanassa sotāpannassa ca kāmā-rāgabyāpādā sādhāraṇā. Puthujjanassa anāgāmissa ca uddhaṁbhāgiyā saṁyojanā sādhāraṇā. Yaṁ kiñci ariyasāvako lokiyaṁ samāpattiṁ samāpajjati, sabbā sā vītarāgehi sādhāraṇā. Sādhāraṇā hi dhammā evaṁ aññamaññaṁ paraṁparaṁ sakaṁ sakaṁ visayaṁ nātivattanti. Yo hi imehi dhammehi samannāgato, na so taṁ dhammaṁ upātivattati.

2. Elucidate the following terms :—
Niddesavāra, paṭiniddesa-vāra, yuttihāra, vibhattihāra, vevacanahāra, paññatti-hāra, parikkhāra-hāra, and samāropana-hāra.

3. What is the meaning of "Netti-pakaraṇa"? Write all that you know about its author. What is the probable date of its composition?

4. Give the substance of the following in English :—

(a) Yo raso catunnaṁ mahābhūtānaṁ upādāya anidassano sappaṭigho mūlaraso, khandharaso, tacaraso, pattaraso, puppharaso, phalaraso ambilaṁ, madhuraṁ, tittakaṁ, kaṭukaṁ, lonikaṁ, khārikaṁ, lapilam, kasāvo, sādu, asādu, yo vā panañño pi atthi raso catunnaṁ mahābhutānaṁ upādāya anidassano sappaṭigho—yaṁ rasaṁ anidassanaṁ sappaṭighaṁ jivhāya anidassanāya sappaṭighāya sāyi vā sāyati vā sāyissati vā sāye vā—raso peso rasāyatanaṁ petaṁ rasadhātu pesā —idaṁ taṁ rūpaṁ rasāyatanaṁ.

(b) Sabbadhammayāthāva-asampativedha-lakkhaṇā avijjā. Tassa vipallāsā padatthānaṁ Ajjhoūna-lakkhaṇā taṇhā. Tassā piyarūpaṁ sāta-rūpaṁ padatthānaṁ Paṭṭhanalakkhaṇo lobho. Tassa adinnādānaṁ padatthānaṁ. Vaṇṇa-santhāna-byañjana-gahaṇa-lakkhaṇā subhasaññā. Tassā indriyāsaṁvaro padatthānaṁ. Sāsavaphassa-upagamana-lakkhaṇā sukhasaññā. Tassā assādo padatthānaṁ. Samāhata-lakkhaṇānaṁ

dhammānaṁ asamanupassana-lakkhaṇā nicca-saññā Tassā viññāṇaṁ padatthānaṁ. Anicca-saññā-dukkha-saññā-asamanupassana-lakkhaṇā atta-saññā. Tassā nāma-kāyo padatthānaṁ.

5. Write notes on the following terms :—

Āsava, ogha, yoga, paramāsa, pitthi, avisāhāra, kāyapāguññatā samatha, dhammāyatana, pañcaṅgika jhāna, and pañcaṅgikamagga.

PALI.

Third Paper.

Examiner—Mahamahopadhyaya Dr. Satischandra Vidyabhushana, M.A., Ph.D.

First Half.

Pali Grammar.

Full marks—50.

N.B.—*Answer any* three *of the following questions.*

All the questions carry equal marks.

1. What is the exact meaning of " Pāli " ? Is there any difference between " Pāli " and " Māgadhī " ? Discuss the date of composition of the Pāli grammar by Kaccāyana.

2. Explain and illustrate the following suttas :—

   (a) Pubbaṁ adhothitaṁ assaraṁ sarena viyojaye.
   (b) Madā sare.
   (c) No ca dvādito namhi.
   (d) Sabbesaṁ ekābhidhāne paro puriso.
   (e) Sesato lopaṁ gasipi.

3. (a) Decline the following words in the objective, dative and locative cases in all numbers :—

   Go, rāja, itthi, satthu, bhadanta, sabba, and tumha.

   (b) Conjugate the following roots in the vattamānā, ajjatanī and parokkhā in all numbers and persons :—

   Gaha, ji, vaca, kara, asa, and jana.

4. (a) Explain, with illustrations, the distinction among " parokkhā," " hīyattanī," and " ajjatanī."

   (b) Substitute compound words for the following :—

   Kucchito puriso, and jāyāya pati.

   (c) Derive the following words :—

   Dhīvara, sattu, geha, attā, kātūna, ghara, dhītā, kīriyā and dhamma.

5. (a) Expound the samāsas in the following :—

   Dāsidāsaṁ, amita ghaṇa-sarīro, tirokuḍḍaṁ, adhitth, cakkhubhūto, and chattupāhanaṁ.

(b) Account for the case-endings in the following :—

    (i) Kosā vijjhanti.
    (ii) Kāke rakkhanti taṇḍulā.
    (iii) Ito tiṇṇaṁ māsānaṁ accayena parinibbāyissāmi.
    (iv) Dhammassa silāghate.
    (v) Gottena Gotamo nātho.
    (vi) Saṅghe dinnaṁ mahapphalaṁ.
    (vii) Adhi devesu Buddho.

(c) Define the following terms :—Ga-sañña ; pa-sañña ; and jha-lā.

SECOND HALF.

SANSKRIT GRAMMAR.

Full marks—50.

Answer any THREE *of the following questions.*

All the questions carry equal marks.

1. (a) Show that some of the technical terms of the Sanskrit Kātantra vyākaraṇa are identical with the corresponding terms of Kaccāyana's Pāli grammar.

  (b) Explain and illustrate the following sūtras :—

    (i) सिद्धो वर्णसमाम्नायः ॥

    (ii) नामिनः स्वरे ॥

    (iii) लिङ्गान्त नकारश्च ॥

    (iv) प्रत्यङ्गनेऽनक् ॥

2. (a) Decline जाग्रत् in the objective case, neuter gender and plural number ; प्रभी in the nominative case, masculine gender and plural number ; and चदस् in the instrumental case, all genders and numbers.

  (b) Explain the formation of गोतमः and उपकुम्भम् ।

  (c) Give the compound form or forms of पाचिका भार्या यस्य सः and expound the samāsa in चमिन्धुः ॥

  (d) Under what circumstances do the following verbs take up ātmanepada suffixes :—

    गम्, जि, चन्, and भु ?

3. (a) Frame sandhi in the following :—

    प्रिये—एति ; उप—एति ; कवी—इमौ ; तत—शृणोसि ; चम—कारः ; पुनः—रमसे ; and एष—गच्छति ।

  (b) Mention, with examples, the principal rules for the use of cerebral ष (ष) ।

(c) Decline the following words in the accusative, instrumental and genitive cases:—

जरा, मति, जानु, दुह्, ब्रह्मन्, एक, and युष्मद् ।

(d) Give the feminine forms of the following:—

शूद्र, सेवक, पुत्रक, गृहपति, and सुरुण्ठ ।

4. (a) Conjugate the following verbs in लट्, लङ् and लिङ् in all persons and numbers:—

द्विष्, श्री, भू, धा, ग्रह्, and भिद् ।

(b) Give the causative forms of ज्ञा and वह्, and the desiderative forms of बु, लभ, and पद ।

(c) Give the forms in लुङ् third person singular number of the following:—

दिश्, कृ and रम् ।

5. (a) Translate the following into Pāli:—

Hard by there was an old washerman who, observing his action, said to his wife, "Who is that man drinking water like a beast?"

"Whether you know him or not," answered she, "I know him well." "Tell me then, who he is," said her husband! "He is Rājā Hodi," answered the woman. "O fool," returned the washerman, "did you ever see a Rājā drinking water like that?"

(b) Translate the following into Sanskrit:—

"I tell you I am the son of a good man," said he, "and one well-to-do, and never before have I seen such troubles. I have become sick from the cold, and I pray you therefore to let me warm myself somewhere at a fire."

PALI.

Fourth Paper.

Examiner—Babu Surendranath Majumdar, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt questions 6 to 9 and any THREE of the FIRST FIVE.

1. What do you know of Aśvaghoṣa and of his important works?   12
2. Give a short account of the author of the Bhaṭṭikāvya.   12
3. What does the word *avadāna* mean? What is its Pali form?   12
Point out the chief characteristics of the style of Avadānakalpalatā.
4. Narrate briefly the stories of Sarvandada and Avantisundarī.   12

5. What do you learn from the Lalitavistara of the selection of a   12
bride and of the accomplishments prized in a bridegroom of noble
descent ?

6. Translate into English *twelve* slokas, selecting *four* from each   48
of the following groups :—·

GROUP A.

(a)   विद्याविशेषेऽपि कृतप्रयत्नः
खला भवत्येव खरस्वभावः ।
व्यालाः फणाग्रस्फुरिचं दधानाः
क्रूरं तमः क्रोधमयं वहन्ति ॥

(b)   दारिद्रनोवृत्तिमिगपद्गरः प्रजानाम्
कीर्तिप्रकाशविभवैः परिपूरिताश्रः ।
अभ्युल्बद्विमलमानसहंसवश्व-
स्तापं हरिष्यति च मे वसुधाधुर्यांश्रुः ॥

(c)   रुख्याक्ष एते निवसन्ति सन्तः
सन्तोषकान्तेषु तपोवनेषु ।
सन्तापनं खौनयनान्तशल्यं
येषां श्रितं चेतसि नावसन्नम् ॥

(d)   शक्रवायुवरुणादयः सुरा
विक्रियां मुनिवराश्च यत्कृते ।
यान्ति तत् स्मरसुखं तृणायते
यस्य कस्य न स विस्मयास्पदम् ॥

(e)   मयापि तथा विरहेण पूर्वं
जन्मांतरे मारविमोहितेन ।
संसक्तसन्तापनिमित्तभूतः
खेदः प्रभूतव्यसनोऽनुभूतः ॥

(f)   किं कौतुकं यदि हरिः कश्चिच्चक्रवाल-
माहन्ति दैवविहितं निजमेव भाव्यम् ।
पञ्चाननं यदि भिनत्ति नखाङ्कुराग्रं
तत्तस्य पौरुषकथापथमेति शौर्यम् ॥

(g)   रहः कृतं कर्म फलत्यवश्यम्
न कर्मणामस्ति फलप्रणाशः ।

विषं निपीतं विजनान्धकारे
प्रासोषु किं न प्रहरत्यसद्सु ॥

GROUP B.

(h) अनाकुलान्यक्षसमुद्गतानि
निम्येषवन्यायतविक्रमाणि ।
तथैव धौराणि पदानि सम
सहर्षितारावबृश्यो जगाम ॥

(i) प्रशुर्विर्विकृतञ्च जीवलोको
वनितानामयमीदृश्ः स्वभावः ।
वषनभग्यैस्तु वज्ञ्यमानः
पुरुषः स्वौविषयेषु रागमेति ॥

(j) परेण हर्षेण ततः स वन्यं
अग्राह वासोऽन्शुकमुत्सषर्ज ।
व्याधस्तु दिव्यं वपुरेव विभ्रत्
तच्छुक्रमादाय दिवं जगाम ॥

(k) एवंविधैः कालचितैस्तपोभिः
परैर्दिवं यान्त्यपरैर्नृलोकम् ।
दुःखेन मार्गेण सुखं च्तियन्ति
दुःखं हि धर्मस्य वदन्ति मूलम् ॥

(l) अभागिनी यद्वहमायनेच्चां
सुचिच्तिनं भर्तुरुदीक्षितुं सुखम् ।
न मन्दभाग्योऽर्हति राहुलाऽप्ययं
कदाचिदङ्कं परिवर्त्तितुं पितुः ॥

(m) मोलीधरैर्षविघत्तहारैः
केयूरविष्टब्धच्चजैनरेन्द्रैः ।
लद्म्यङ्कमध्ये परिवर्त्तमानैः
प्राप्ता मुहुर्ध्यैरपि मोत्तधर्म्ैः ॥

(n)

वसुंद्रवद्व्यामपि गामवाप्य
पारं जिगीषन्ति मद्यार्णवस्य ।
लोकस्य कामेन त्रितृप्तिगर्हि
पतन्त्विरमाभिरिवार्णवस्य ॥

GROUP C.

(o)

अमरपुंगतान अप्सरार्धां
रूपमनारम दृष्ट्वा बोधिसत्त्वे ।
सांतरियमभवत् तदा हि तासां
प्रमद नु कीदृश बोधिसत्त्वमाता ॥

(p)

वयांमद्व अभिमन्यया आत्मा
परममनोहरस्वरूपमप्सराणाम् ।
इमां नृपतिबधू निरीक्षमाणा
जिज्ञ विपश्यत इदय आत्मभावम् ॥

(q)

सो च नरवरेन्द्रो दृष्टचित्तो भविता
यदर्तनु प्रविष्टा द्रिष्टिकानंवमाद्व ।
यश्व अद्व मनापो या च मे प्रीतिकामा
सा हि कुर्वत आत्मां मखर्पयित्वात्मभावम् ॥

(r)

ये किल्विषाब्द हृदये मधुराः सुवाचः
कुम्भो विषस्य परिपित्त यथामृतम् ।
हुष्मश्यैलांशलवत् काठनान्तरात्मा
सव्वेष्य वा चिरमदर्शन तादृशानाम् ॥

(s)

किं सार्घे पुरुष रूपविवर्धगात्रः
सर्वीन्द्रियेभि विकलो गुरु प्रश्वसन्तः ।
यद्वा जन्मष्यक उदराकुल प्रामकृच्छ्रा
सूने पुरौष स्वकि तिष्ठति कुत्सनीये ॥

(t)

प्रेक्षावि ताव इमा मरकन्य सुलड्डतिका-
स्तत्कारण व्रज्ञित भूषित आगांतकाः ।
को रूर्णमिमं समवेक्षन रक्षति रागरतो
अपि जर्जरकाय व ग्रोषितजीवितकः ॥

7. Rewrite in-classical Sanskrit any *two* of (*o*), (*s*), (*t*).   5

8. Give in simple Pali the substance of any *two* of the following :—   8

  (*u*)   क्रुध्यन् कुलं घच्य॑त द्विप्रवह्नि-

          यौंखन् सुतस्त्प्षरति मां समनुद्रु ।

          इत्यं नृपः पूर्व्वमवालुलोचे

          ततोऽनुजच्चे गमनं सुतस्य ॥

  (*v*)   इतः स दैत्यः प्रामश्रौनस्त एवार्हति स्वयम् ।

          विषवृत्तांऽपि सबद्धेर स्वयं द्वेत्तुमसास्मतम् ॥

  (*w*)   न तज्जलं यन्न सुचारुपङ्कजम्

        न   पङ्कजं तद्द यट्लीनघटपङ्म् ।

        न घट्पङोऽसौ न जुगङ्ग यत् कलम्

        न गुञ्जितं नन्न जहार यन्मनः ॥

9. Expound the *samāsas* in the words underlined in (*u*) and (*w*)   3
and parse विषवृत्त in (*v*).

PALI.

GROUP A.

FIFTH PAPER.

Examiner—BABU SURENDRANATH MAJUMDAR, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

All questions are of equal value.

Attempt ANY SIX.

1. Explain any *five*:—(1) Metathesis, (2) Assimilation, (3) Prosthesis,
(4) Glide-sounds, (5) Samprasāraṇa. (6) Svarabhakti, (7) Euphonic
consonants ; and illustrate them with examples from Sanskritic languages.

2. (*a*) Give examples of the change of (1) *a* into *u*, (2) *u* into *o*, (3) *kh*
into *k* and (4; *l* into *n* in Pali and Prakrit.

(*b*) What do you mean by the *Ya-śruti* of the Jaina Prakrit ?

3. (*a*) Show the influence of (i) *y* in changing *a* into *i*, and of (ii) *v* in
changing it into *o*.

(*b*) Show that as a general rule the change of the dentals (i) into
palatals is caused by a *y* as the second member, and into (ii) cerebrals
by a *r* as the first member of a conjunct syllable.

4. Compare the declensions of noun stems ending in *i* and *u* in Sanskrit,
Pali and Prakrit.

5. Mention the distinguishing features of the following Prakrit dialects:—

Māgadhī, Śaurasenī and Paiśacī.

6. Turn into Sanskrit or Pali and name the dialects :—

(a) *Halā Saündale, tuvatto bi tāḍakassabassa ime assamarukkhaū piadaretti takkemi yeṇa nomāliūkusumapelavā bi tumaṁ edānaṁ ālavālapūrane niüttā.*

(b) *Ṇaṁ ekkassiṁ diähe vedasaladāmaṇḍabe ṇaliṇīpattabhāuṇagadaṁ udaäṁ tuha hatthe Dannihidaṁ ūsi.*

(c) *Ale kahehi kahiṁ tuë eśe mahū-maṇi-bhāśule lāākie aṅguliaë samāśādië.*

(d) .... *Paśīdante bhāvamiśśe ; na hage idiśakammakāli.*

7. What do you mean by Analogy? State, and illustrate with Sanskritic examples, its influences on language.

8. Give a short account of the philological researches of the ancient Indians.

9. Examine briefly the main theories connected with the original home of the primitive Indo-Europeans.

10. What do you know of Bopp, his researches and defects ?

PALI.

GROUP A.

SIXTH PAPER.

Examiner—DR. D. R. BHANDARKAR.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

SIX *questions only are to be attempted, of which those marked with an asterisk are compulsory.*

*1. (a) What qualities constitute Aśoka's dhamma ? (b) How was 30 it to be shown in practice according to him ? (c) What means did he suggest to his people to develop it in themselves ? (d) What measures did he adopt to disseminate it amongst them ? (e) Was Aśoka's conception of dhamma in any way influenced by Buddhism ?

*2. Explain fully the following passages with reference to context, giving the various interpretations put on them :— 30

(a) Parisā pi yute āñapayisati gaṇanāyaṁ hetuto cha vyaṁjanato cha.

(b) Bherīghoso aho dhaṁmaghoso vimānadasaṇā cha hastidasaṇā cha agikhaṁdhāni cha aññāni cha divyāni rūpāni dasayitpā janam.

(c) Bandhanabadhasā patividhānāye apalibodhāyo mokhāye-cha eyaṁ anubadhaṁ pajāva-ti-vā-kaṭābhikāle-ti-vā mahālake-ti-vā viyāpatā-te.

(d) Nātikā-va-kāni-nijhapayisaṁti jivitāye-tānaṁ nāsaṁtaṁ-va nijhapayitave dānaṁ-dāhaṁti pālatikaṁ upavāsaṁ-va-kachhaṁti.

(e) Iyaṁ cha sāvane vivuthena duve sapaṁnālāti satā vivuthā ti 256.

39

3.   What do you know of the following :—   10
(a) Aśoka as a ruler ?
(b) The art of the stone-cutter in his time?
4. (a) What Greek sovereigns have been mentioned by Aśoka—in   10
what edicts, and in what connection?
    (b) Show how the exact date of Aśoka's coronation can be deter-
mined from his mention of their names.
5.   Annotate the following words :—   10
(a) samāja, (b) anusaṁyāna, (c) vinīta, (d) āsīnava, and (e) nijhati.
6. (a) What steps did Aśoka take for the preservation of animal   10
life?
    (b) What was his attitude towards the various religious sects ?
7.   Write a short note on the peculiarities of the different dialects
traceable in Aśoka's inscriptions.   •
8.   Draw up a list of the towns, countries and peoples mentioned   10
in Aśoka's edicts.   Identify them as far as possible.

PALI.

GROUP A.

SEVENTH PAPER.

Examiner—DR. BENIMADHAB BARUYA, M.A., D.LITT.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Attempt FIVE *questions only.*

1.   Give an account of the Vajjis, dwelling chiefly on these points :—   20
(1) their political organisation and system of administration ; (2) the
integral parts of their dominion ; (3) their contribution t osocial, politi-
cal, religious and philosophical developments in India from the 6th
century B.C. to the 3rd century A.D.   •
2.   Criticise the general form and style of such Pali poetical com-   20
positions as represented by the Thera-Theri-gāthā, the Sutta-nipāta
and the Sagātha-vagga of the Saṁyutta-nikāya, and determine their
place in the history of Indian dramas and epics.
3.   Write a note on the origin and growth of the Jātaka literature,   20
and establish its connexion with other earlier, contemporary or later
Indian literature.   *Or,*

What is the difference between a Jātaka and an Apadāna?   Illus-
trate your answer with examples.   What is the chief interest of the
study of the Jātakas and Apadānas in relation to the history of Bud-
dhism and of Buddhist fine arts?
4.   Give a systematic   account of the system of the disposal of the   20
dead in India   from the earliest times, noting whether, and to what
extent, the substitution of one method for another constitutes a defi-
nite step in the course of the evolution of the idea of immortality.

Discuss the exact bearing of the system on the history of Indian architecture, literature, medical science, hero-worship, and of some of the ascetic practices, notably Cannibalism.

5. Distinguish between a Niddesa and an Atthakathā. Examine   20
how far the tradition telling us that works of a commentarial nature had originated with Buddha Gotama, and were developed immensely by his disciples and by their disciples is reliable. Can you trace any such works in the ancient Vedic literature ? Cite instances in each case as far as practicable.

6. A Buddhist writer of proved ability points out that the term   20
' Dhamma ' had a far wider meaning with the Buddha than with the Buddhist emperor Asoka. Indicate the connotative changes undergone by the term up till the reign of Asoka. What new aspect of Buddhism is presented by Asoka's Dhamma, and what measures did he adopt for its propagation?

7. Depict a picture of Indian or Aryan life in the light of the Brah-   20
majāla and other Suttas that you are acquainted with, ascertaining the important part played by it in the articulation of Buddha's ' Doctrine and Discipline.'

8. Give an accurate description of the organisation of the trade-   20
guilds mentioned in the Buddhist texts. Examine whether these guilds of the working people are still to be found in India, how far they have been affected by political changes, and what benefits the Indian people may derive from them, if they be brought into a more working order.

9. Criticise, in the light of modern researches, Megasthenes' ac-   20
count of India, the fragments of which alone now survive.

PALI.

GROUP A.

EIGHTH PAPER.

Examiner—BABU SAILENDRANATH MITRA, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write an essay on *one* of the following subjects :—   100
   (a) Buddha as a story-teller.
   (b) The Dhamma of the Tipiṭaka compared with the Dhamma of Asoka.
   (c) Growth of the women leaders of the Buddhist Church and their influence on social ideals.
   (d) Social customs at the time of Gotama Buddha.

PALI.

GROUP C.

FIFTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1.   Translate into English :—   10

Paccayehi anunehi tena te bahavo ahuṁ
Theraṁ kulehi saṁsatthaṁ Mahātisso'ti vissutaṁ,
Kulasaṁsatthadosena saṅgho taṁ nihari ito
Tassa sisso bahulamassu Tissatthero'ti vissuto.
Kuddhôbhayagiriṁ gantvā vasi pakkhabahi tahiṁ
Tatoppabhuti te bhikkhū Mahāvihāraṁ nāgamuṁ.
Evaṁ te bhayagirikā niggatā Theravādato
Pabhinnâbhayagirikehi Dakkhina-vihārakā yati
Evan te Theravāﬁehi pabhinnā bhikkhavo dvidhā
Mahā Abhaya bhikkhū te vaḍḍhetaṁ dîpavāsino.

(a) Who were the other schismatics in Ceylon? Say whether or   2
not the Abhayagirikas can be indentified with the Vetulyakas men-
tioned in the Kathāvatthu-commentary, supporting your answer in
each case by evidence.

2. (a) Give an estimate of the state of society in Ceylon previous   10
to Vijaya's conquest.   Inquire how far the Ceylon chronicles differ in
this respect from the Indian records. Is not queen Anulā a representa-
tive of the same barbaric instincts which characterise a Śūrpanakhā
in the Rāmāyaṇa or the Yakkhinis in the Valāhassa Jātaka ?

(b) Determine the historical relations of the Singhalese race with
the Dravidians, and those of both with the Aryans.

3.   What are the salient features of Buddhism as a living faith in   10
Ceylon ?   How far do the Ceylon chronicles bear out king Asoka's
boastful claim that he made great conquest in Ceylon, not by the
sword but by the Dhamma ?

4.   " It may be said in justice to the Aryans in India that a spirit   5
of toleration permeated their whole life.· Religious persecutions in
the strict señse of the term were unknown in their history until
certain foreign rulers and invaders, whether they embraced an Indian
faith or not, set an example."

Refute or justify this sad observation, citing instances in each case
from the Mahāvaṁsa and other texts that you have read.

5.   Who was Dutthagāmani ?   When and where did he reign ?   12
Is there any ground for regarding him as a contemporary of king
Milinda (Menander) ?   What are the valuable services that he ren-
dered to the Buddhist faith ?

6.   " Whether in respect of arts or in respect of literature, the   12
people of Ceylon seem to be utterly lacking in orginality." How far
is this view supported by the evidence of the Great Chronicle ?

Or, .

Write a note on the advancement of learning in Ceylon under the
successive rule of her kings from Mahāsiva to Mahānāma.

7. Who was Buddhaghosa ? Where did he come in contact with 14
Revata ? Can you find out any traces of the influence of the system
of Patañjali in his works, and can you adduce any substantial proofs
in support of the tradition that he wrote his Atthasālinî while in
India ?

8. Translate into English :— 25

    Nikāyantara-laddhihi, asammisso anākulo
    Mahāvihāravāsinam, vācanāmagganissito,
    Madhurakkhara-samyutta, attho yasmā pakāsito
    Tasmā hitattha kāmena, karontena ca yam mayā
    Puññam adhigatam tena sukham pappontu pānino.
    Antarāyam vinā cāyam, yathā siddim upāgato
    Tathā kalyāna-samkappā, siddhim gacchantu pāṇînam.
    Nara-nāriganākiṇṇe, asamkiṇṇa-kulākule
    Phîte sabbaṅga-sampanne, pasanna-saritudake,
    Nānāratana sampuṇṇe, vividhāpaṇa saṅkate
    Kāveri-pattane ramme, nānārūmopasobhite,
    Kelāsa-sikharākāra-pāsāda-patimaṇḍite
    Kārita Kaṇhadāsena, dassanîyo manoramo,
    Vihāre vividhākāra-cāru-pākāra-gopuro
    Tattha pācîna-pāsāde, mayā nivasatā sātā.

SIXTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Attempt questions 1, 6, *any* TWO *from Group A, and any* TWO
from Group B.

GROUP A.

1. Transliterate and translate into English, adding notes on im- 26
portant words :—

2. Transcribe in Aśoka Brāhmî :— 12

*Hidatapālate dusampatipādaye amnata agāya dhammakāmatāya aṇā-
a palikhāya agāya susūsāya agena bhayena agena usāhena. Esa*

cu khomama anusathiya dammāpekhā dhammakāmatā ca suve suve vadhitā vadhis cevā.

3. Translate the above into English.   12

4. Write notes on any *four* :—   12
   Samāja, Ajivika, Pativedaka, Thaira, Caghamti, Atapatiye.

5. Summarise the teaching of the Toleration Edict.   12

GROUP B.

6. (a) Transcribe in Devanagri or Roman :—   20

(b)   *Either,*

Write notes on any *four* :—(1) the Drāvidi of Bhattiprolu, (2) Śā-radā, (3) Horiuzi Palmleaf MS. Alphabet, (4) Bhaiksukī, (5) Vatteluttu.

Or,

Show the development of the modern Bengali *a, e, ta* and *ma* from the Brāhmī signs.

7. Discuss briefly the origin of the alphabet in which the Mansera   15
version of Asoka's Edicts is inscribed.

8. Describe in some detail Asoka's system of administration.   15

9. How far is the tradition of the Buddhists about the conversion   15
of Aśoka early in his reign borne out by the inscription ?

10. What are the views of Aśoka as regards war and conquest ?   15

PALI.

GROUP C

SEVENTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

SIX *questions only are to be attempted, of which those marked with an asterisk are compulsory.*

*1. What princes of Āryāvarta and Dakshiṇāpatha and their coun- 20 tries are mentioned in the Allahabad pillar inscription as having been conquered by Samudragupta ? Identify them as far as possible.

2. (a) Prepare a dynastic list of the imperial Gupta kings, specify- 15 ing the names of their queens and the dates known for them.

(b) What is the exact initial year of the Gupta era ? Who founded it ? By what other name was it known in Kathiawar in the later period ?

*3. (a) Who was Rudradāman, and what was the extent of his do- 20 minions ?

(b) What different views are held in regard to the Śātakarṇi whom Rudradāman twice defeated but did not destory in conse- quence of his relationship with him being not remote ?

4. (a) What was the original name of the Vikrama era ? 15

(b) How was it connected with the Mālava tribe ? ‘State your reasons in full.

5. Show what light the Junagarh inscription of Rudradāman, 15 the Allahabad pillar incription of Samudragupta, and the Mandasor inscription of Kumrāagupta throw on the development of artificia poetry in ancient India.

6. What do you know of the following :—(1) Yaudheyas, (2) 15 Rattarāja, and (3) Yaśaḥkarṇadeva ? .

7. Give a summary of the contents of the Harsha stone inscrip- 15 tion of the Chāhamāna king Vigrahapāla, showing clearly its import- ance both for the political and religious history of Rajputana.

8. ‘‘ As lately shown by Mr. Fleet, the *mahārāja* Bhojadeva, son 15 of the *mahārāja* Rāmahadradeva, who is mentioned in two copper- plate grants from Mahodaya, is distinct from the above-mentioned *parameśvara* Bhojadeva ’’ (i.e. Bhojadeva of a Gwalior fort inscrip- tion).

Criticise the above statement, adducing reasons in support of your views.

9. Identify the following places, specifying in what connection 15 they are mentioned :—(1) Gopagiri. (2) Gavīdhumat, (3) Pṛithūdaka, (4) Khetaka, (5) Sākambharī, (6) Mattamayūra, (7) Ānandapura, (8) Kākanada, (9) Airikiṇa, and (10) Daśapura.

PALI.

GROUP C.

EIGHTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

All the questions carry equal marks.

FIRST HALF.

Full marks.—50.

Answer any THREE *of the following questions.*

1. Give a complete history of the kingdom of Gāndhāra, noticing specially the following points:—(a) the geographical limits of the kingdom, (b) the races that exercised political influence in it, (c) its chief towns and what they were noted for. and (d) an account of it as left by Hwenthsang.

2. Write historical and geographical notes on the following :—
Jālandhara, Bukephala, Sākala, Balabhi, Bharoch, Kurukṣetra, Srughna, and Sankisa.

3. Give a brief account of the following kingdoms :—
Kanoj, Kosāmbi. Vaisāli, Pauṇḍravardhana, Malwa, Samatata, and Tāmraliptī.

4. Draw a map of Southern India locating all the kingdoms visited there by Hwen-thsang. Give some account of each of the kingdoms.

5. Give concise account of *three* of the following :—
(a) The temple of Sun at Multan as seen by Hwen-thsang and other foreign travellers.
(b) Māyāpura at Haridwar as described by Hwen-thsang.
(c) Akṣaya-vata at Prayāga as noticed by Hwen-thsang and other foreign writers.
(d) The Lumbini garden as visited by Fahian and Hwen-thsang.
(e) The Kukkuṭapāda vihāra as visited by Fahian and Hwen-thsang.

SECOND HALF.

Full marks—50.

Translate into Pali any *two* of the following extracts :—
(a) Now as she spoke these words, meditating death, the head and body of her lifeless son began moving towards her on the ground, which, when she perceived, she dropped her weapon ; taking up those bloody tokens one by one, she pressed them to her bosom. Then addressing the king, she cried, "Now will I go to Mecca and bring back with me those that will avenge my cause."

(b) Now the two birds flew up so high that at last they came to a region of rain, hail, and snow, which kept falling continually, and the female bird, drenched and terrified, cried:—" For God's sake, save my

life and take me to some places of shelter. "What can be done now?" said her companion. "It is your own fault, why did you not listen to good advice?"

(c) With these words he ran away from the place and made his escape. Coming to the river-bank, he went down to drink water, for he was thirsty, and there, when he had put down his hands towards the water, he saw on the fingers the black stain of the collyrium, and he drew them back, saying, "This is the only memento of my love which I possess, and I must not wash it away."

(d) "No," answered the woman; "stay you here! First I will go to Sāhibō, and tell her you have come, ask her if I may bring you there or not?" "If she ask you who has come," said Mirza, "say it is her cousin, the son of her mother's sister." So the old woman started off, going to the house of Sāhibō, to whom she gave the message, and Sāhibō said, "Where has he come from?"

(e) Once upon a time there was a donkey, and also a bullock, and neither the one nor the other had any regular master, but any one who wished used to catch them, and load them with stones or with timber, and work them to death. So one day the bullock said to the donkey, "Look here, we have no master and both our backs are sore. Every one puts upon us. Let us then go to the hills together and shift for ourselves!"

ARABIC.

FIRST PAPER.

*Examiner—*MAULAVI ABU MUSA AHMADUL HAQ.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English:—

قال فقد آمنا بك يا رسول الله و صدقناك و شهدنا أن
ما جئت به هو الحق و اعطيناك على ذلك عهودنا
و مواثيقنا على السمع و الطاعة فامض يا رسول الله لما أردت
فو الذي بعثك بالحق لو استعرضت بنا هذا البحر و خضته
لخضناه معك ما يتخلف منا رجل واحد و ما نكره أن تلقي
بنا عدوا غدا اناالصبر عند الحرب صدق عند اللقاء لعل الله
تعالى أن يريك ما تقربه عينك فسربنا على بركة الله فسار

رسول الله صلى الله عليه و آله و سلم و نشطه ذلك ثم قال سيروا
على بركة الله و أبشروا فان الله قد وعد في إحدى الطائفتين والله
لكأني أنظر الى مصارع القوم ثم ارتحل رسول الله صلى الله
عليه و آله و سلم من ذفران و سلك على ثنايا يقال لها الأصافر ثم
انحط منها على بلد يقال له الدبة ثم نزل الحيان بيمين و هو
كثيب عظيم كالجبل ثم نزل قريبا من بدر *

2. Comment on the following verses :—

(۱)   بات الخيـــــــال من الصليت مؤرقي
يقــــزي السراة مع الربابـ الملثق
ما راعفـــــي الابيـــــاض وجيهـــــة
تحت الدجنة كالسراج المشــرق

(ب)   نام الخلي من الهمـــــوم و بات لي
ليـــــل اكابده و هم مضــلــــــع
و سهــــــرت لا اســـري و لا في لذة
ارقي و اغفل ما لقيت الهـجـــــع
ابغي وجوه متخارجي من تهمـــــة
ازمت على و سر منها المطلـــــع
جزعا لمعتبــــة الوليــــد و لم أكن
من قبل ذاك من الحوادث اجزع
يا ابن الخلائف ان سخطك لامرئ
أمسيـــــت عصمتـــه بلاء مفظـــع
فلانـــزعن عن الـــذي لم تهــــوه
ان كن لي و رأيـــت ذلك منزع

فاعطف فداك ابي على توسعا

و فضيلة فعلـــى الفضيلـــة تتبع

(ج) يا دار عاتكـــــة التـــي بالأُزهـــر   3

أوفوته بقفـا الكثيـــب الأُحمـــر

بفناء بيتك و ابن مشعب حاضر

في سامر عطـــر و ليل مقمـــر

فتلازما عنـــد الفـــراق صبابة

أخذ الغـــريم بفضل ثوب المعسر

(د) أصبـــح المك ثابت الآساس   5

بالبها ليل من بني العباس

بالصدور المقـدمين قديمـــا

و الرؤس القماقـــم الرؤاس

يا أمير المطهـــرين من الذ

م و يا رأس منتهي كل رأس

انت مهدي هاشم و هداها

كم أناس رجوك بعد أياس

لا تقيلن عبد شمس عثـــارا

و اقطعن كل رقلة و غراس

3. (a) Notice the allusions in :—   8

(أ) ثم خرجنا حتى نزلنا العدوة التي قال الله عز و جل

فجئت عتبة بن ربيعة *

(ب)   قدم الطويل فأشرقت و استبشـــرت

أرض الحجاز و بان فى الاشجـــار

ان الطويل من آل حفص فاعلمـــوا

ساد الحضـــور و ساد فى الاسفـــار

(ج)   كيف بالعفـــو عنهم و قديما

قتلوكم و هتكـــوا الحرمات

أين زيد و أين يحيى بن زيد

يا لها من مصـــيبة و ترات

و الإمام الذي أصيب بحرا

ن إمام الهدى و رأس الثقات

(b) Rewrite the above extracts with vowel-points.   8

4. Answer either of the following two questions :—   8
(a) Note the grammatical mistake, if any, in—

و صخر او من ذا مثــل صخر اذا غدا

بسلهبـــة الابطـــال قبـــا يقـــودها

If الآطال قب بساهمة is read for بسلهبة الابطال قبا , how would the
sense stand ?

(b) Who is the author of the following verse :—

سعى بعد هم قوم لكى يدركوهم

فلم يفعلــوا، و لم يليمــوا و لم يألوا

Quote that parallel verse for it, which has been composed by طرويح ,
giving a literal translation of both.

5. Write explanatory notes in Arabic on any six of the following   12
expressions :—

الاغانى - امشي نحوه العرضنة - برك الغماد - الرمل -

العروض - على من تكون الدبرة - قدم على التفيئة الشام -

لا خياك الله و لا بياك - بيوته شرد ـ نبي لادمجه ادماجا

من لؤلؤ *

6. Write a synopsis in Arabic of the story of وقعة بدر as related 14
in the text.

7. Translate into Arabic :— 25

The tenth century of the Christian era is a fortunate and illustrious period in Spanish history. Under 'Abdu'l-Raḥmān III and his successor, Ḥakam II, the nation, hitherto torn asunder by civil war, bent its united energies to the advancement of material and intellectual culture. Ḥakam was an enthusiastic bibliophile. He sent his agents in every direction to purchase manuscripts, and collected 400,000 volumes in his palace, which was thronged with librarians, copyists, and book-binders. All these books, we are told, he had himself read, and he annotated most of them with his own hand. His munificence to scholars knew no bounds. He made a present of 1,000 dinārs to Abu'l-Faraj of Isfahān, in order to secure the first copy that was published of the great ' Book of Songs' on which the author was then engaged.

ARABIC.

SECOND PAPER.

Examiner—MAULAVI ABU MUSA AHMADUL HAQ.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1: (a) Render into simple English, making the sense of each line 21
clear :—

طــربالقـــــدرق الـــظــــلا   م ورق انفـــاس بالصباح

و سري الى القلب العليــــــــل عليل انفاس الرياح

و مليحــــة ترنـو بنــــر   جســة و تبسم عن اقاح

قامت و قد برد الحلــــــيْ تميس في ثُنى الوشاح

تشـــرو و كـــل غفائهــــا   برد على كبد اقتـــراح

يا ليـــل هللك من صبا   ح ام لنجمك من براح

سأريق ماء شبيــبتـــــي   ما بين ريحــــان وراح

فيم العتـــاب ولا لهـــم   غي و لا لهم صـلاحي

و كعا ذ لاتي فى المليحــــــة عاذ لاتك فى السماح

و هواى للبيــــض الصبا   ح هواك للبيض الصفاح

ح و لوع كفك بالرماح　　و ولـــوع كفى بالقـــدا

و عليَّ ادمان امتـــداح　　و عليك إدمــان النَدي

يلوي يد القدر المتاح　　فليـــعـــل رايك انــه

ك لك المعلى فى القداح　　و افظر فانـــك فى الملو

(b) Into how many parts is a قصيدة generally divided ?　Name　10
each of them, and illustrate your answer from the above ode.

(c) What meaning has المعلى in the last line ?　Give a full des-
cription of the game الميسر.

2.　Expand in Arabic the idea in one of the following passages :—　16
Either,

اراني اذكر الشيخ كلما طلعت الشمس او هبت الريح
او نجم النجم او لمع البرق او عرض° الغيث او ذكر الليث
او ضحك الروض ان للشمس محياه و للريح رياه و للنجم
حلاه و علاه و للبرق سناؤه و سناه و للغيث يداه و نداه
و لليث حماه و للروض سجاياه ففي كل صالحة ذكراه
و في كل حادثة اراه فمتى انساه و اشدة شوقاه عسى الله
ان يجمعني و اياه * ‏　*Or,*

الوجه الحسن عنوان منخيل و ضمان جميل فان عضده
اصل كريم فانا به زعيم و ان نصره بيت قديم فانا له نديم و الشيخ
بحمد الله دارة البدر حسن اشراق و فأرة المسك طيب اخلاق
و شجر الاترج طيب اعراق و طيب مذاق و طيب ورق و ساق
و حرج على من هذه خصاله ان يغبني وصاله فانا اخطب
اليه مودته و ابذل روحي لها مهرا *

3.　Explain any four of the following امثال :—　8

(۱) الملوك اذا خدمتهم ملوك و ان لم تخدمهم اذلوك
(۲) من لحظنا بنظر شزر بعناه بثمن نزر (۳) احتكم الى

الحجارة فالتقتير نصف التجارة (۴) المرء من ضرسه في شغل
ومن نفسه في كل (۵) النذل لا يألم العذل (۲) فارقذا
خشفا واتى جلفا (۷) ما كان اجود من لو كان (۸) فعل
على السخط من القرط *

4. Translate into English :—   4

ما اشبه نفسي في هذه الاسفار الا بالخيال الطارق او بلمع
البارق او الغلام الآبق او الجواد السابق او بهرب السارق او السهم
المارق و انما هو الشد و الترحال و الخيل و البغال و الحمير
و الجمال *

5. Derive and give the etymological meanings of the following,   8
and say under what parts of speech you would classify them :—

هلمّ - و اطربا - ريثما - بودّي - بودّي - لا ابالك - لا آلوه - العتبى -
يا ليت قومي *

6. Write out in Arabic a biographical sketch of بديع الزمان الهمداني   12
with dates and remarkable events.

7. Translate into Arabic :—   25
The chief man of letters of the next generation was Abū Manṣūr
al-Thaʻālibī (the Furrier) of Naysābūr. Notwithstanding that most
of his works are unscientific compilations, designed to amuse the
public rather than to impart solid instruction, his. famous anthology
of recent and contemporary poets—the Yatīmatu'l-Dahr, or ʻ Soli-
taire of the Time '—supplies indubitable proof of his fine scholarship
and critical taste. Successive continuations of the Yatīma were
written by al-Bākharzī (1075 A.D.) in the Dumyatu'l-Qaṣr, or ʻ Statue
of the Palace '; by Abu'l-Maʻālī al-Ḥazīrī (1172 A.D.) in the Zīnatu'l-
Dahr, or ʻ Ornament of the Time '; and by the favourite of Saladin,
ʻ Imādu'l-Dīn al-Kātib al-Iṣfahānī (1201 A.D.), in the Kharīdatu'l-
Qaṣr, or ʻ Virgin Pearl of the Palace.'

ARABIC.

Third Paper.

Examiner—Shams-ul-ulma Amjad Ali, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Translate into English extract A, and *any one* of the following :—

A.

45

قحطت البادية ايّام هشام بن عبد المك فوفد عليه رئس

القبائل ٭ فجلس لهم و فيهم صبيّ ابن اربع عشرة يسمّي

درواس ابن حبيب في رأسه ذؤابة و عليه بردة يمانية ٭

فاستصغره هشام و قال لحاجبه ما يشاء احد ان يصل الينا الّا

وصل حتى الصبيان ٭ فقال درواس يا اميرالمومنين ان دخولي

لم يخلّ بك و لا انتقصك و لكنه شرفني و ان هولاء قدموا لامر

فهابوك دونه و ان الكلام نشر و السكوت طيّ لا يعرف الّا بنشره

فاعجبه كلامه و قال انشر لا امّ لك فقال انّا اصابتنا سنون ثلاث

فسنة اكلت اللحم و سنة اذابت الشحم و سنة انقت العظم

وفي يديكم فضول اموال فان كانت لله عزّ و جلّ ففرّقوها على

عباده و ان كانت لهم فلا تحبسوها عنهم و ان كانت لكم فتصدقوا

بها عليهم فان الله يجزى المتصدّقين و لا يضيع اجر المحسنين

و ان الوالي من الرعيّة كالروح من الجسد لا حيوة له الّا

به فقال هشام ما ترك الغلام في واحدة من الثلاث عذرا و امر

بمائة الف دينار ففرّقت في اهل البادية و امر له بمأية الف

درهم فقال ارددها في جائزة العرب فما لي حاجة في خاصّة
نفسي دون عامّة الناس *

B.

15 امر رسول الله صلى الله عليه و سلم ان ينحروا و يحلقوا فتوقفوا
فغضب حتى شكى الى زوجته ام سلمة فقالت يا رسول الله
اخرج و انحرواحلق فانهم تابعوک - فخرج و نحر و حلق
رأسه حينئذ خراش بن امية الخزاعي - ثم رجع رسول الله صلى
الله عليه و سلم الى المدينة و ما فتح من قبله فتح كان اعظم
من هٰذا الفتح - قال الزهري لما كان القتال حيث لا يلتقي
الناس - فلما كانت الهدنة و وضعت الحرب اوزارها و امن
الناس بعضهم بعضا فالتقوا و تفاوضوا فى الحديث و المنازعة -
فلم يكلم احد بالاسلام احدا يعقل شيئا الا دخل عليه - فلقد دخل
في دينک السنتين فى الاسلام مثل ما كان قبل ذٰلک او اكثر *

C.

15 مما اخبرنا به المفضل بن عبد الله بن محمد بن عبد الله بن
المحبر بن عبد الرحمٰن بن عمر بن الخطاب عن ابيه عن جدّه
عن ابي ظبيان عن عبد الله بن عباس رضي الله عنهم قال قدم
نافع بن الارزق الحروري الى ابن عباس رضي الله عنهما يسأله
عن القرآن فقال ابن عباس يا نافع القرآن كلام الله عز و جل
خاطب به العرب بلفظها على لسان انصحها فمن زعم ان فى
القرآن غير العربية فقد افترى قال الله تعالى قرآنا عربيا غير ذي
عوج و قال تعالى بلسان عربي مبين - و قد علمنا عن اللسان
40

لسان محمد صلى الله عليه و سلم - و قال الله تعالى و ما

ارسلنا من رسول الا بلسان قومه ليبين لهم و قد علمنا ان العجم

ليسوا قومه - و ان قومه هذا الحي من العرب *

D.

15   اعلم ان للملك على رعيته حقوقا و ان لهم عليه حقوقا - فاما

الحقوق التي تجب للملك على رعيته فمنها الطاعة و هي الاصل

الذى ينتظم به صلاح الجمهور و يتمكن به الملك من الانصاف

للضعيف من القوي و القسمة بالحق و مما جاء فى التنزيل

من الحث على ذلك و هي الاية في هذا المعنى قوله

تعالى يَأَيُّهَا الَّذِينَ اٰمَنُوٓا اَطِيعُوا اللّٰهَ وَ اَطِيعُوا الرَّسُوۡلَ و أُولى الأَمۡر

مِنۡكُمۡ و من أمثالهم و امرة لمن لا يطاع و لم ينقل في تاريخ

و لا تضمنت سيرة من السير ان دولة من الدول رزقت من طاعة

جندها و رعاياها ما رزقته هذه الدولة القاهرة المغولية - فان طاعة

جندها و رعاياها لها طاعة لم ترزقها دولة من الدول - فاما الدولة

الكسروية فانها على عظمها و فخامتها لم تبلغ ذلك - و قد كان

النعمان ابن المنذر ملك الحيرة نائبا لكسرى على العرب و بين

الحيرة و المدائن التي كانت سرير ملك الاكاسرة فراسخ معدودة

و النعمان في كل ايام قد عصى على كسرى - و اذا حضر

مجلسه تبسط و فجرأ على مجاوبته و كان متى اراد خلع طاعته

دخل البرية فامن شره *

(b) Answer *any four* of the following :—

(1) Who was عرقوب, and why has his name become proverbial?
Quote Arabic verse or verses in proof.

40

(2) What do you know of شدّاد ابن عنترة ؟

(3) Compare between the style of ابو تمام and فرزدق .

(4) Write down briefly the life of امرو القيس , quoting lines from his writings.

(5) How do you distinguish between Pre-Islamic, Mukhazram, Movallad and Mubdas styles ? and which appeals to you most, and why ? Discuss.

(6) Distinguish between History and Legends. When, why and by whom the science of history was introduced ?

(7) Why is it that the language of Hadis is not so authoritative as that of the Pre-Islamic poets ?

ARABIC.

FOURTH PAPER.

Examiner—SHAMS-UL-ULMA MUFTI MD. ABDULLAH TONKI

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Your answers should be in Arabic.

اجيبوا عن اي خمسة تختارونها من تلك السبعة اللتي بين ايديكم *

المفصل

10   1.   متى يمتنع الاسم من الانصراف ؟ بينوا كما بين في كتابكم المفصل *

10   2.   متى يجوز دخول الفاء على خبر المبتدأ و متى يمتنع دخولها عليه ؟ بينوا و اوضحوا كما بين و اوضح في كتابكم *

10   3.   ما المراد بترخيم المنادى وكم من شرائط لجوازه؟ بينوا وأتوا بالامثال الموضحة له كما في كتابكم *

10   4.   ما الذي لابد منه لوقوع الجملة حالا اسمية او فعلية - ماضيا او مضارعا مثبتا او منفيا ؟ بينوا وأتوا بالامثال *

5. ما الوجوه الستة من حيث الاعراب في " لاحول و لا قوة الا بالله " و ما اسبابها ؟ بينوا بالتفصيل *   10

6. هل يجوز حذف المضاف و ترك المضاف اليه على اعرابه ؟ فان جاز فاوردوا له امثالا للتوضيح و التنوير كما في كتابكم *   10

7. ما معنى قول صاحب المفصل " و من حق الموصوف ان يكون اخص من الصفة او مساويا لها و لذلك امتنع وصف المعرف باللام بالمبهم و بالمضاف الى ما ليس معرفا باللام لكونهما اخص منه" بينوا بالتفصيل و اوضحوا بالتمثيل *   10

الفرائد

اجيبوا عن اي خمسة تشاؤنها من تلك الستة اللتي بين ايديكم *

1. ما مرجع الصدق و الكذب عند الجمهور و ما قال الجاحظ و النظام فيه ؟ بينوا بالايضاح مع الايجاز *   10

2. ما معنى فائدة الخبر و لازمها ؟ بينوا بالتفصيل و نوروا بالتمثيل *   10

3. اينما يلقى الخبر الى المخاطب المنكر مجردا عن التاكيد ؟ فصلوا و مثلوا *   10

4. قال الله تعالى حكاية عن امرأة عمران " رب اني وضعتها انثى " و المخاطب و هو الله تعالى ليس منكرا و لا جاهلا - فما وجهه ؟ بينوا و مثلوا لزيادة الانكشاف و الاتضاح *   10

10   بينوا فوائد حذف المفعول به كقوله تعالى هل

يستوي الذين يعلمون و الذين لا يعلمون - و اوردوا له امثالا

شتى *

6.   10   بينوا فوائد اثبات اجزاء الكلام عمدة كانت او فضلة -

و عليكم الكشف بامثال موضحة *

ARABIC.

FIFTH PAPER.

Examiner—SYED ABDUL HAQ BAGHDADI.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

GROUP A.

Answer any THREE *questions.*

اجب عن ثلاث من المسائل الآتية :—

1.   16⅔   قد كان لكم آية في فئتين التقتا ، فئة تقاتل في

سبيل الله و اخرى كافرة يرونهم مثليهم رأى العين *

من المخاطب (بقد كان لكم) *

و لمن يرجع ضمير (مثليهم) ان كان يرجع الى المسلمين فهو

مناقض لآية الانفال (و يقللكم في اعينهم) فكيف تدفع تناقض

الآيتين - و اذا ارجعته الى المشركين فهل يكون صحيحا -

و على فرض صحته فما معنى الآية *

———

2.   قل ان كنتم تحبون الله فاتبعوني يحببكم الله   16⅜

و يغفر لكم ذنوبكم و الله غفور رحيم ⊙ قل اطيعوا الله و الرسول فان

تولوا فان الله لا يحب الكافرين *

بين معنى الحب و الطاعة *

هل تولوا فعل ماضٍ فقط أم يحتمل ان يكون غير ماض

ايضا و اذا كان يحتمل غير الماضي فهل ذلك الغير هو المضارع

ام الامر *

الدعوى هي محبة الله و يصدق عليها باطاعة الرسول

صلعم ففسر الآية باسلوب تحصل به المطابقة بين الدعوى

و التصديق *

———

3.   كنتم خير امة اخرجت للناس تأمرون بالمعروف   16⅞

و تنهون عن المنكر و تؤمنون بالله و لو آمن اهل الكتاب لكان

خيرا لهم *

اكتب تفسير (كنتم خير امة) *

اخبرني عن تعلق جملة (اخرجت للناس) بما قبلها

لم عبر بلو في (و لو آمن اهل الكتاب) مع ان كثيرا من اهل

الكتاب كانوا قد آمنوا و ان لو تأتي للمحال *

4.   فسر بالانجليزية او العربية الآيات الآتية كما فسر   16⅞

الزمخشري :—

لقد من الله على المؤمنين اذ بعث فيهم رسولا من انفسهم

يتلوا عليهم آياته و يزكيهم و يعلمهم الكتاب و الحكمة و ان كانوا من

قبل لفي ضُلل مبين ۞ او لمّا اصابتكم مصيبة قد اصبتم
مثليها قلتم انّي هٰذا قل هو من عند انفسكم انّ الله على كلّ
شيء قدير ۞ و ما اصابكم يوم التقى الجمعٰن فباذن الله و ليعلم
المؤمنين ۞ و ليعلم الّذين نافقوا و قيل لهم *

اجب عن ثلاث من المسائل الآتية :—

5.   ١٦پ   (٨) عن ابي هريرة رض قال سمعت رسول الله
صلعم يقول (من خرج من الطاعة و فارق الجماعة فمات مات
ميتة جاهلية ، و من قاتل تحت راية عمية يغضب لعصبية أو
يدعو العصبية او ينصر عصبية فقتل فقتلة جاهلية ، و من خرج
على امتي بسيفه يضرب برها و فاجرها و لا يتحاشى من مؤمنها
و لا يفي لذي عهد عهده فليس منّي و لست منه -) *
ترجم الحديث الشريف بالانجليزية - اشرح لفظتي عمية
و عصبية و بين المعنى المراد منها - و اذكر محلهما و محل
(فقتلة) من الاعراب *

6.   ١٦¼   عن أبي سعيد قال قال رسول الله صلعم (ما بعث
الله من نبيّ و لا استخلف من خليفة الا كانت له بطانتان بطانة
تأمره بالمعروف و تحضه عليه و بطانة تأمره بالشر و تحضه عليه
و المعصوم من عصمه الله) *

ترجم الحديث الشريف بالانجليزية - هل البطانتان تكونان من جنس واحد أم مختلفتى الجنس فان كانتا مختلفتيين فما هو جنس كل واحدة منهما *

لاي حكمة بالغة جعل الله وهو الرحمن اللطيف مع كل نبي و خليفة بطانة تأمره بالشر و تحضه عليه - انبأ الحديث الشريف عن عصمة طائفة كبيرة من الامة مع انه لا عصمة لغير الانبياء عليهم السلام فاجب عن ذلك جوابا يزيل الشك و يستأصل الشبهة *

7.　　　عن انس قال قال رجل يا رسول الله (الرجل　　16⅜

منا يلقي أخاه أو صديقه أفنحنى له قال لا قال أفيلتزمه و يقبله قال لا أفيأخذ بيده و يصافحه قال نعم *

ان الثابت من هذا الحديث القولي هو المصافحة فقط ، و قد روى الشعبي حديثا فعليا ثبت منه التقبيل و هو (ان النبي صلعم تلقي جعفر بن ابي طالب فالتزمه. و قبل ما بين عينيه) و قد روى عن ابي بكر رض اتباعه لهذا الحديث الفعلي و عمله به (عن البراء قال دخلت مع ابي بكر اول ما قدم المدينة فاذا عائشة ابنته مضطجعة قد اصابها حمي فاتاها ابو بكر فقال كيف انت يا بنية و قبل خدها) فهل يمكن التطبيق بين الحديث القولي و الحديث الفعلي و كيف ذلك بينه و اوضحه *

16⅔ تعالوا قالوا في سبيل الله او ادفعوا قالوا لو 8.

نعلم قتالا لا اتبعنكم هم للكفر يومئذ اقرب منهم للايمان يقولون

بافواههم ما ليس في قلوبهم *

اشرح بالعربية او الانجليزية الاحاديث الآتية :—

(ا) ابي بكرة قال لمّا بلغ رسول الله صلّى الله عليه و سلم

ان اهل فارس قد ملّكوا عليهم بنت كسرى قال لن يفلح قوم

ولوا امرأة رواه البخاري *

(ب) عن الحارث الاشعري قال قال رسول الله صلى الله

عليه و سلم آمركم بخمس بالجماعة و السمع و الطّاعة و الهجرة

و الجهاد في سبيل الله و انه مّن خرج من الجماعة قيد شبر

فقد خلع ربقة الاسلام من عنقه الا ان يراجع و من دعا بدعوى

الجاهلية فهو من جثي جهنم و ان صام وصلى و زعم انه مسلم

رواه احمد و الترمذي *

_____

ARABIC.

SIXTH PAPER.

لابّد لكم ان تكتبوا الجوابات كلها بالعربية :—

I.

10 بينوا مراتب العارفين و المعدات التي اليها احتياج 1.

السالكين الى ان يصلوا الى كمال الحق اليقين و يحصل لهم

النجاة من الضلال المبين و يتجلى في قلوبهم الصافية انوار معرفة رب العالمين *

2.

اكتبوا سوال (١) ام سوال (ب) *

سوال (١)

30

بينوا معاني هذه العبارة و مطالبها بلسان عربي - من آثر العرفان للعرفان فقد قال بالثاني و من وجد العرفان كانه لا يجده بل يجد المعروف به فقد خاض لجة الوصول و هناك درجات ليست اقل من درجات ما قبله آثرنا فيها الاختصار فانها لا يُفهمها الحديث و لا يشرحها العبارة و لا يكشف المقال عنها غير الخيال و من احب ان يتعرفها فليتدرج الى ان يصير من اهل المشاهدة دون المشافهة و من الواصلين الى العين دون السامعين للاثر *

سوال (ب)

30

اشارة - جلّ جناب الحق عن ان يكون شريعة لكلّ وارد او يطّلع الّا واحد بعد واحد و لذلك فان ما يشتمل عليه هذا الفنّ ضحكة للمغفل عبرة للمحصّل فمن سمعه فاشمأز عنه فليتّهم نفسه لعلّها لا تناسبه و كلّ ميسّر لما خلق له *

3.

بينوا تحقيقات هذه الالفاظ - ايثار - عرفان - خوض - لجة - تدرج - عين - اثر *

II.

1.

من هو اول من قطع درب بغراس و ما وقع فيه من الاختلاف من المؤرخين و في ايّ عام وقع غزوة المصيصة و من كان قائدا للعساكر فى هذه الغزوة *

10

لكم الخيار في تحرير سوال (١) ام سوال (ب) *   2.

سوال (١) اشرحوه بالعربية :—

30   ثم لما دخلت سنة ١٣٩ امر بعمران مدينة المصيصة و كان
حائطها متشعثا من الزلازل و اهلها قليل في داخل المدينة
فبنى سور المدينة و اسكنها اهلها سنة ١٤٠ و سمها المعمورة
و بنى فيها مسجدا جامعا في موضع هيكل كان بها و جعله
مثل مسجد عمر مرات ثم زاد فيه المامون ايام ولاية عبد الله بن
طاهر الحسين المغرب و فرض المنصور فيها لالف رجل ثم نقل
اهل الخصوص و هم فرس و صقالبة و انباط نصارى و كان مروان
اسكنهم اياها و اعطاهم خططا في المدينة عوضا على منازلهم على
ذرعها و نقض منازلهم و اعانهم على البناء و اقطع الفرض قطائع
و منازل *

سوال (ب)

30   بينوا مطالب هـــذه العبارة الآتية بالعربيـــة :—   3.
حدثنا شيبان بن فروخ قال حدثنا ابو عوانة عن المغيرة عن
السفاح الشيباني ان عمر بن الخطاب رضي الله عنه اراد ان
يأخذ الجزية من نصارى بني تغلب فانطلقوا هاربين و لحقت
طائفة منهم ببعد من الارض فقال النعمان بن رزعة او زرعة بن
نعمان انشدك الله في بني تغلب فانهم قوم من العرب ناثفون
من الجزية و هم قوم شديدة نكايتهم فلا يعن عدوك عليك بهم
فارسل عمر رضي الله عنه في طلبهم فردهم و اضعف عليهم
الصدقة *

4. ‏—: تحقيقات هذه الالفاظ مطلوبة منكم‏ 10

‏تشعت - مرات - فرض - خطط - اقطع - قطائع - ناثفون -‏

‏نكاية - اضعاف *‏

ARABIC.

SEVENTH PAPER.

Examiner—SHAMS-UL-ULAMA AMJAD ALI, M.A.

The questions carry equal marks.

A. GENERAL.

Only FIVE questions to be answered.

1. " Omer's accession to the Caliphate was of immense value to Islam." Discuss.
2. Who was Táriq ? What is his importance in the history of Islam ?
3. Write what you know of Saladin. What impression did he leave on the minds of his friends and foes ?
4. Estimate the abilities of Mu'āwiyah as a statesman.
5. Give a description of the battle of Karbala. What part did Shimr play in it ?
6. Of the many Abbaside Caliphs, whose reign is most interesting to you, and why ?
7. What is your opinion as to the character and abilities of Omar-ibne-Abdil Aziz ?
8. " The battle of Badar sealed the fate of the infidels." Justify the statement.
9. Write a note on any *four* of the following :—

(a) Al-Medina, (b) Wahhabis, (c) Jezya, (d) Baitul Maqdis, (e) Imam Hambal, (f) Qoraish, (g) Mohajereen, (h) Siffin, (i) Mosailema Kazzab, (j) Ibn Batoota, (k) Amirul Momenin, (l) Ashab Suffah.

B. INDIA.

Not more than TWO questions to be answered.

1. Write what you know of any *three* of the following :—

(m) Qutbuddin Aybak, (n) Nadir Shah, (o) Mahmood Gawan, (p) Akbar, (q) Sher Shah, (r) Ibrahim Lodi, (s) Raziyah.
2. Some historians believe that Aurangzib was not responsible for the downfall of the Mogol dynasty. Justify or criticise the statement.
3. What part did Noor Jahan play in the reign of Jahangir ?
4. What was the aim of Mahmood of Ghazni in invading India so many times ? How far was he successful ?
5. Give some examples to show how the Mohammadan influence brought about the changes in the habits, customs and language of the Hindoos.

ARABIC.

EIGHTH PAPER.

Examiner—SHAMS-UL-ULAMA ABU NASR MD. WAHEED, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write in English an essay on *any one* of the following subjects:— 100
1. The extent to which Western Arts and Sciences were influenced by Arab genius.
2. The forces which led to the standardisation of the Arabic language which has continued to be a living language.
3. The rise and development of the Scholastic Theology (علم الكلام)

in Islam, and the part subsequently given to Greek philosophy in it. How far is this part found overdone in view of the present position which the Greek philosophy occupies? What was the original intention in introducing Greek philosophy?

PERSIAN.

FIRST PAPER.

Examiner—SHAIKH ABU NASR GILANI.

Candidates are required to give their answers in their own words as far as practicable. .

The figures in the margin indicate full marks.

1. Translate into English, adding notes where necessary:— 15

دهـــر نی قالـــب قـــدیمـــي او
طبـــع نی باعـــث کـــریمـــي او
نشـــود دهـــر و طبـــع بی قولش
جان در نهاد بی طولـ
فعل و ذاتش برون ز آلت و سوست
بس که هو ئیتش بر از کی و هوســـت

آنکـــه بی خامه زد ترا بی رنگ

هـم تـواند گـزاردن بی رنگ

از دروـــت نـگاشت صنـع الـه

نه ز زرد و سپید و سرخ و سیـاه

وز بروئت نـگاشتـه افـلاک

ازچه ازباد و آب و آتش و خاک

دادهٔ خود سپــهـر بستـاند

نقـش الله جـاودان مـانـد

آفریـدت ز صنـع در تكليـف

كرد فضلـش ترا بخـود تعـریف

گنجـی بُدم نهانی من

خُلِـقَ الْخَلـقُ تا بدانی مـن

كرده از كاف و نون چـو دَرثمیـن

دیده را یک دهـان پر ازیاسیـن

2. (a) Give the root meaning as well as the ordinary signification 3
of the words دهر and تكليف.

(b) Quote the حدیث to which line 9 in the above extract refer, 4
and give its translation in Persian.

(c) What does نقش الہ signify in line 7 ? State fully to what do 5
سین in line 10 and یا, نون and كاف allude ?

ٮ 3. ٮ Explain in Persian *any three* of the following and relate the 12
stories or traditions to which they refer:—

(a) هركرا عون حـق حصـار شود

عنكبـوتیـش پرده دار شود

(b) شوسمـاری ثنـای او گوید

اژدهـائی رضـای او جوید

(c) زهـــــر در كام او شكـــــر گـــردد

سنـــگ در دست او گهر گردد

(d) سوزنی چون دید با عیسی بهـم

بخیه با روی او نگندش لا جرم

(e) بست موری را کمر چون موی سر

کرد او را با سلیمـــان در کمـــر

خلعت اولاد عبّـــاسش بداد

طا وسینج بی زحمت طاسش بداد

4. Reproduce in your own Persian the substance of the following 27 extracts and clearly set out the underlying thoughts in each :—

(a) فاختــــه غائب ست گـــوید کو

تو اگر حاضــــری چه گوئی هو

حاضران را ز هیبت ست مثال

گر ترا حصّه غیبت ست بنــال

تا درین خـــطـــهٔ تــکاپوئی

یا همـــه پشت یا همـــه روئی

چون ازین خطه یکدو خطوت رفت

جان طالب عنان عشـــق گرفت

مردگی کفر و زندگی دین ست

هر چه گفتند مغز آن این ست

(b) آدم از مـــــادر عـــــدم زاده

او چــــراغی بدو فرستـــاده

دیدهٔ او بگاه منـــزل خـــواب

تا سو عرش بر گرفتـــه حجـــاب

زحمت آب و گل دراین عالـــم

رحمتـــش نام کرده فضـــل قدم

حلـــقـــه حلقها بحلقهٔ موی

سحنـــه شرعها بصفحـــه روی

غـــرض کن ز حکـــم در ازل او

آوّل الفکـــر آخـــر العمـــل او

عاشقان سوی حضرتش سرمست

عقل در آستین و جان بر دست

پیش توحید او نه کهنه نه نو ست

همه هیچند هیچ اوست که اوست

پردهٔ عاشقـــان رقیـــق ترست

نقش این پردها دقیـــق ترست

غالب عشق هست مغلـــوبش

خود ترا شرح داد مقلـــوبش

ابر چون ز آفتـــاب دور شود

عـــالم عشـــق پر ز نور شـــود

Answer ONE *only of the two following sets of questions.*

FIRST SET.

MANTIQ-UT TAIR OF 'ATTAR.

5. Paraphrase clearly the following lines into simple Persian 10
prose :—

جملـــه عاجز روی بر خـــاک آمدند

در خطـــاب ما عرفنـــاک آمدند

من که باشم تا زنم لاف شناخت

آن شناخت او را که جز با او نساخت

چون جز او در هر دو عالم نیست کس

با که سازد اینست سودا و هوس

هست دریائی ز جوهر موج زن

تو ندانی این سخن شش پنج زن

هر که او آن جوهر دریا نیافت

لا شد و از لا نشان جز لا نیافت

آن مگو چون در اشارت نایدت

دم مزن چون در عبارت نایدت

نه اشارت می پذیرد نه بیان

نه کسی زو علم دارد نه نشان

تو مباش اصلا کمال اینست و بس

تو ز توگم شو وصال اینست و بس

تو در او گم شو حلولی این بود

هرچه این نبود فضولی این بود

جزو کل شد چون فرو شد جان بجسم

کس نسازد زین عجایب تر طلسم

6. Write in your own Persian the story of شیخ صنعان as related ء12 in منطق الطیر.

Or,

Write in Persian an account of the life of شیخ فرید الدین عطار and comment upon his writing.

9. Explain and amplify in your own Persian the idea contained 12
in the following lines :—

سالــــکان را بیـــن بدرگاه آمـــده

جمـــلــه پشتا پشــت هم راه آمده

هســـت با هــر ذرّه درگاه دگـــر

پـــس ز هـــر ذرّه بـــدو راه دگـــر

تو چه دانـــي تا کدامیـــن ره روي

وز کدامیـــن ره بـــدان درگـــه روي

این زمـــان کو راعیان جوئي نهانست

وان زمان کو را نهان جوئي عیانست

گر عیـــان جوئي نهـــان آنگـــه بود

ور نهـــان جوئي عیان آنگـــه بود

ور بهـــم جوئي چو بیچونست او

آن زمـــان از هر دو بیـــرون ست او

تو نکردي هیچ گم چیزی مجـــوی

هر چه گوئي نیست آن چیزی مگوی

SECOND SET.

HAFIZ SHIRAZI.

5. Paraphrase the following into simple Persian prose :—   10

سمن بویان غبار غم چو بنشینند بنشانند

پربرویان قرار دل چو بستیـــزند بستـــانند

بفتراک جفا دلها چو بربندند بربنـــدند

ز زلف عنبرین جانهـــا چو بفشانند بفشانند

بعمرى يكنفس با ما چو بنشينند برخيـزند

نهال شوق در خاطر چو برخيـــزند بنشانند

ز چشم لعل رمّانى چو ميخندند مي بارند

ز رويم راز پنهانى چو ميبينند ميخـــوانند

سرشک گوشه گيـــران را چو دريابند دريابند

رخ از مهر سحر خيزان نگــــردانند اگر دانند

دواى درد عاشق را كسى كو سهل پفـــدارد

ز فكـــر آنان كه در تدبيـــر درمانند درمانند

چو منصـــور آن مراد آنان كه بردارند بردارند

كه با اين درد اگر در بنـــد درمانند درمانند

در آن حضرت چو مشتاقان نيـاز آرند ناز آرند

بر اين درگاه حافظ را چو ميخوانند ميرانند

6. Give in your own Persian the idea contained in the following 12 lines of Hafiz, and quote the Qur'anic passage to which they allude. Also explain the allusion contained in the 3rd line :—

در ازل پرتو حسنت ز تجـــلّــى دم زد

عشـــق' پيدا شد و آتش بهمـــه عـــالم زد

جلوۀ كرد رخت ديد ملک عشـق نداشت

عيـــن آتش شد از اين غيـــرت و بر آدم زد

مدّعى خـــواست كه آيد بتمـــاشاگه راز

آمد بر سينـــۀ نا محـــرم زد

ديگـــران قرعۀ قسمـــت همه بر عيش زدند

دل غم ديدۀ ما بـــود كه هـــم برغـــم زد

7. Compare and contrast between خواجه حافظ شيرازي and 12 فريد الدين عطار as Sufi poets.

PERSIAN.

Second Paper.

Examiner—Syed Muhammad Khalil Ahmad, M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Translate into English *either* A *or* B :—

A.

<div dir="rtl">

شبی مشک رنگ و دراز و مجاور

چو زلفین میعاد هجــــران دلبر

به لولو ازو فرقِ گـــردون مــــزین

بقیـــرو ازو روی عالـــم مقیــر

کشیـــده مظلّــه سپــه بر ثریا

فروهشته دامنش بر کوی عنبــر

چو بر روی فرعون بر دست موسی

بـــروی فلــک بر ثریا منــور

هوا چون ضمیــر ستمــگار تیره

ستاره چو رخسار مومن به محشر

ز هولش دل و طبع روباه گیــرد

دل شیر جنگي و طبع غضنفــر

چو عهــد عدو جــرم آفاق تیره

چو تیغ یلان روی مریّخ احمــر

هوا زو به سیماب صبح خجستــه

فرو شسته زنگار از اطـــرافِ خاور

</div>

سوی باختر کرد شب‌روی و برزد

سیاه و سپیــــده دم از کوه سر بر

به لاله بدل کرد گردون بنفشـــه

به پیروزه بفریـد یاقوتِ اصـــفــر

صبا را ندانی ز عطّـــارِ تبّـــت

زمین را ندانی ز دیبای شُستـــر

گلِ سرخ چون رویِ خوبان زخجلت

بنفشه چو زلفیـن جانان معطـــر

گهی اَبر طاری و خورشید رخشان

چو تیغِ علی[۴] بود در کتفِ کافر

گل آبستـــن از باد مانند مریم

هزاران پســـرزاده از چـــار مادر

جهان‌جوی در حسنِ او گشته حیران

سخن‌گوی در وصفِ او مانده مضطر

چه چیـــز بهتـــر و نیکو تر است در دنیی

سپــاه نه ملکـــی نه ضیاع نه رمئی

سخن شریفتـــر و بهتر است سوی حکیـم

ز هرچه هست درین رهگذار بی معنـــی

بدیـــن سخـــن شدهٔ تو رئیـــس جانوران

بدین فتاده شد ایشـــان بزیرِ تیـــغ و شرپی

سخن که بانگ تو است او جدا نگر بچه شد

ز بانگ آن دگران جز بحرفهـــای هجـــی

نگاه کن که بدین حــرفهـــای چگونه خبــر
زبان زید رساند بجـــان عمرو همـــي
درین حدیث خبر نیســت سوی جانوران
خرد گوای من است اندرین قــوی دعوي
سخن به منــزلتِ مرکبی است جانِ ترا
برو توانی رفتــن به ســوی شهــرِ هدي
در بدي نکشــاید مگــر کلیـد سخــن
هم او کــشــاید در های آفت و بلــوی

گهی سخن شکر و قند و مرهم است و طلي
زبان بــکام در افعـــی است مردِ دانا را
حـــذرت باید کردن همــی ازآن افعـــي
سخــن سپــارد بیهــوش را به بند و بلا
سخــن رسـاند هشیــار را بعهــد و لوي
باسپ و جـامگٔ نیکو چرا شدي منشغــول
سخنــت نیکو باید نه طیلســان و ردي
دریغ دار ز نادان سخــن که نیست صواب
به پیش خوک نهادن نه منّ و نه سلــوي
رها شد از شکــم مـاهي و شب و دریا
به یک سخن چو شنودیم یونس ابن متي
دروغ گوی بآخــر نــکال شهــره بــود
چنانکه سوی خردمنـد شهــرهٔ شد ماني

2. Explain the allusions contained in the above two passages. **5**

3. What do you think of the metrical veracity of ناصر کسرو ? **5**
Show from the above passages that he has failed in the Prosody.

4. Translate into English, adding explanatory notes where neces- **10**
sary, *either* A *or* B.

A.

گر خـــداوند قضـــا کرد گفـــه بر ســـرِ تو

پس گفـــاه تو بقـــولِ تو خداوندِ ترا ست

بدکفش زي تو خدا نيست بدين مذهبِ زشت

گرچه ميگفت نياري کت ازين بيم قضا ست

اعتقـــادِ تو چنيـــن است و ليکـــن بزبان

گو کی آن حاکم عدل است و حکيم الحکما ست

با خـــداوند زبانت بخـــلافِ دل تست

با خداوندِ جهـــان نيـــز ترا رویِ ریا ست

بميـــان جبـــر و قدر ره را بجـــوی

که سوی اهل خرد جبر و قدر درد و عنا ست

راست آنست ره دين که پسندِ خرد است

که خرد اهلِ زمين را ز خداوند عطـــا ست

B.

بالی هفـــت چرخ مدوّر دو گوهرند

کز نورِ هر دو عـــالم و آدم منـــوّرند

اندر مشيمـــهٔ عدم از نطفهٔ وجـــود

هر دو مصـــوّرند ولی نا مـــصـــوّرند

محـــسوس نيستند و نگنجند در حواس

مانند در نظـــر که نه مظلـــم نه انورند

پروردگانِ دايهٔ قــدس اند در قـــدم

گوهر نينـــد اگــرچه باوصاف گوهرند

زين رویِ آفرينش و زانسـوی كائنات

بيـــرون و اندرون زمانه مـــجــارند

اندر جهان نيند هم ايشان و هم جهان

در ما نيـــنـد در تن ما روح پرورند

5. What is Poetic License, and how far has ناصر خسرو availed   5
himself of it ?   Give examples.

6. Translate in English *either* A *or* B :—   15

A.

چون برزمين طليعهٔ شب گشت آشكار

آفاق ساخت كسوتِ عباسيان شعـــار

پيــدا شد از كرانهٔ ميــدان آسمـــان

شكل هلال چون سـرچوگانِ شهـــريار

ديدم ز زرّ پختـــه بدين تختِ لاجورد

نو نی كه آن بخطّ خفی كرده شد نگار

رویِ فلــك چو لجّهٔ دريا و ماه نو

مانند كشتــیی كه ز دريا كنـد گذار

يا برمثال ماهیِ يونس ميــان آب

آهنگ در كشيـــدنِ او كرده در كنـار

يا همچو يونس آمده بيرون ز بطنِ حوت

افتـــاده بر كرانهٔ دريا نحيـــف و زار

در معرضِ خلافِ جهانی ز مرد و زن

قومیست در نظاره و خلقی در انتظار

من با خرد بعحجــــرۀ خلــــوت شتافتم

گفتــــم که ای نتیجۀ الطـــاف کردگار

باز اینچه نقش بوالعجب وشکل نادرست

کز کارگاه غیــب همیگــردد آشــــکار؟

آن شاهد از کجاست که این چرخ شوخ چشم

از گوش او برون کشد این نغــــز گوشوار

گردون ز بازویِ که درید ست این طراز

گیتیِ ز ساعد که ربود ست این ســـوار

گر جرمِ کوکب است چرا شد چنین دوتا

ور پیکر مه است چرا شد چنیـــــن نزار

گفت انچه بر شمردي ازین جمله هیچ نیست

دانی که چیست با تو بگویم به اختصار

نعــــلِ سمفــــدِ شاه جهانست کاسمان

هر ماه بر سرش نهد از بهــــر افتخــــار

گفتــــم که از مدائحِ ذاتِ مبــــارکش

رمــزی بگــــوی تا بودم از تو یــــادگار

B.

صبـــح دم چون کلّه بنـــدد آهِ دود آسـای من

چون شفق در خون نشیند چشم شب پیمایِ من

مجلسِ غم ساخت است و من چو بیدِ سوخته

تا بمـــن راوق کـــنـــد مـــژگانِ می پالایِ من

رنگِ بازيچــه اسـت كار گنبـدِ نارنج نارنج رنــگ

چند جوشــم كز برونم نگــذرد صفــرای من

روی خــاک آلودِ من چون كاه بر ديوارِ حبـــس

از زخـــم كهگــل كنــد اشك زرِّين اندای من

مار ديدي در گيا پيچــان كنــون در غــارِ غــم

مار بين پيچيـــده در ساقِ گيا آســـای من

اژدها بين حلقـــه گشتــه خفتـــه زير دامنــم

زان نه جنبـــم ترسـم آگه گردد اژدرهــای من

تا نه ترسند اين دو طفـــل هندو اُندر مهدِ چشم

زيرِ دامن پوشــم اژدرهای جانــفـــرسای من

دست آهنگـــر مرا در مارِ ضحــاكي كشيــد

گنـــج افريدون چه ســود اندر دلِ دانای مـــن.

قطـــب وارم بر سرِ يك نقطــه دارد چار ميــخ

اين دو مـــربِّع ذنب فعل زحـــل سيمـــای من

غصّهٔ هر روز و يا ربِّ يا ربِّ هــر نيــم شـب

تا چه خواهد كرد يا ربِّ يا ربِّ شب هــای من

زانكـــه داغ آهنـــي آخـــر دوای دردها ست

ز آتـــش آهِ من آهن داغ شـــد بر پای من

چون ربابم كاسه خشك است و خزينه خاليست

بس طنـــابم در گلو افـــگنــده اند اعدای من

سيامـــري سيــرم نه مـوسی سيــرتم تا زنده ام

در ستم گوســالـه آلايــد يدِ بيــضای مـــن

برگِ خُرمــايم كه از من بادزن ســازند خــلــق

بادِ سردم در لبســت و ريز ريز اجــزاى مـــن

نانۀ مشكـــم كه گربنـــدم كنى در صد حصــار

سوى جان پرواز جويد طيـــب جان افــزاى من

7. Explain in Persian *either* A *or* B :—   10

A.

روزِ جشنِ عرب و وقتِ نشاطِ عجـــم است

شاد زی گرچه فلك باعثِ اندوه و غم است

خويشتن رنجـــه مدار از قتـــلِ نقدِ مراد

می خور انگار كه اين نيـــز وفا و كرم است

شاهِ انجم ز كميـــن گاهِ اُفق بيرون تاخت

وقتِ پرداختنِ مدحتِ شاهِ عجـــم است

قصۀ ملكِ جم و جامِ مـــرصّع مشنـــو

جام بركف نه و انكار كه اين ملكِ جم است

ذكرِ باغِ ارم و آتـــشِ نمـــرود مـــكـــن

آتشی بركـــن و انـــكار كه باغِ ارم است

B.

پيش كه صبح بر دَرد شقّــۀ چتـــرِ عنبرى

خيز مگر به بـــرقِ می برقع صبـــح بردرى

پيش كه غمزه زن شود چشـــم ستارۀ سحـــر

بر صدفِ فلـــك رســـان خندۀ جام جوهرى

برکش مینِ غم ز دل پیش که صبح بر کشد

این خشن هزار مینِ از سرِ چرخ چببـــري

کاه چو حالِ عاشقاں صبـــح کند ملـــوّنی

گه چو حلبِ دلبراں مرغ کنـــد نواگـــري

ز

حاصل وقتت را نگـــرتا دم رفتـــه بنگـــري

8. Pick out and explain in Persian the allusions in 7(A) and 7(B). 5

9. What are the distinguishing characteristics of the *qasidas* of 5 خاقانی and ظهیر فاریابی ?

10. Treat philologically the comparison of Adjectives in the Persian and English language. 5

11. Render into idiomatic Persian the following:— 20

> He who died at Azan sends
> This to comfort all his friends:
> Faithful friends! It lies, I know,
> Pale and white and cold as snow;
> And ye say, 'Abdullah is dead!'
> Weeping at the feet and head,
> I can see your falling tears,
> I can hear your sighs and prayers;
> Yet I smile and whisper this,—
> *I* am not that thing you kiss;
> Cease your tears and let it lie;
> It was *mine*, it is not *I*.
>   Allah glorious! Allah good!
> Now thy world is understood;
> Now the long long wander ends,
> Yet ye weep my erring friends,
>   Farewell, friends! Yet not farewell;
> Where I am, ye too, shall dwell.
> When ye come where I have stepped,
> Ye will wonder why ye wept;
> Ye will know by wise love taught,
> That here is all, and there is naught.
> Be ye certain all seems love,
> Viewed from Allah's throne above;
> Be ye stout of heart and come
> Bravely onward to your home!
> La ilaha illallah! ! !

PERSIAN.

THIRD PAPER.

Examiner—SHAMS-UL-ULMA-MAWLAVI VILAYET HOSSAIN.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

جواب تمام سوالات باید که در فارسي داده شود ٭

1.   15   حالات و واقعات سلطان الفضلاء افضل الدين

خاقاني رحمة الله عليه بيان کنيد و شرح اشعار ذيل بمعرض تبيان آريد :—

فلک کجرو ترست از خط ترسا

مرا دارد مسلسل راهب آسا

پس از تعليم دين از هفت مردان

پس از تاويل وحي از هفت قراء

پس از ميقات سعي و حج و عمره

پس از قربان و تعظيم مصلي

مرا از بعد پنجه سال اسلام

نزييد چون صليبم بند برپا

روم زنار بفدم زين تعکم

روم ناقوس بوسم زين تعدا

دگر قيصر سکالد راز زردشت

کنم زنده رسوم زند و استا

بسرگين خر عيسي را ببندم

رعاف جا ثليق نا شکيبا

2.   در طبقهٔ ثالث که مصنف کتاب تذکرهٔ دولت شاه

شعراء را که بسلک تحریر کشیده ازانمیان صرف حالات ده

شاعر بیان کنید *

3.   احوال حضرت فرید الدین عطار نیشاپوري رحمة

الله علیه یا احوال حضرت حکیم کامل نظامي گنجوي

رحمة الله علیه بیان کنید و اشعار ذیل را بفارسي سلیس

شرح دهید :—

سبحان خالقی که صفاتش ز کبریا

در خاک عجز میفکند عقل انبیا

گر صد هزار قرن همه خلق کائنات

فکرت کنند در صفت عزت خدا

آخر بعجز معترف آیند کی اله

دانسته شد که هیچ ندانسته ایم ما

از سوال (۱) یا از سوال (ب) هر سوالی را که خواهند

تحریر نمایند *

سوال (۱)

4.   مضمون عبارت مرقومهٔ ذیل بزبان فارسي بیان

نمایید :—

قربان خاک پای مبارکت شوم فرمان واجب الاذعان

مانند وحي ربانی نازل گردید و فرق غلام فدوي را باوج فرقد

رسانید مضامین قضا آیین آن که مشعر بر تعیین افواج

و سپاه بود بر مراتب امید دولتخواهان و بیم بدسگالان

افزود حق سبحانه و تعالی سایهٔ آفتاب خسروانرا بر مفارق جهانیان پاینده بداراد *

20   5. تعریف حکمت و تقسیم آن چنانکه در اخلاق جلالي مذکور شده شرح دهید *

مطالب عبارت زیرین بفارسي ایضاح کنید :—

10   6. هرچند لذت شجاعت در بدایت نه نماید چه مبادیٔ آن مردي است بخوف هلاک اما بالآخرة لذات و منافع آن مشاهده گردد خواه در دنیا و خواه در آخرت خاصه چون بذل نفس اؤ در حمایت دین و تقویت شرع مبین بوده باشد *

سوال (ب)

20   7. خلاصهٔ مضمون عبارت پسین بفارسي بیان کنید :—

آبای فضائل که ابتدای معالی بودند با بنات الدهر قرین گردیدند و امهات مکارم که در دلبري بر پي بر تري و با خوبان بزبري برابري میکردند بر برو روی خود درہ بجای درہ دیدند بیازہ بی زار از معاملهٔ دوشینه گشتند و صوفیان از سواد سودای شبانه گذشتند *

20   8. تعریف روح حیواني و روح انساني و فرق میان هر دو روح بیان نموده شرح دهید که روح حیواني از کدام چیز ترکیب یافته *

10   9. شرح این عبارت بزبان فارسي کنید :—

بدانکه نماز ستون دین مسلماني و بنیاد دین است و پیشرو و سید همه عبادات است و هرکه این پنج نماز

فریضه بشرط خود و بوقت خود بجای آورد عههی بسته
آمد او را با حق تعالی که در امان و حمایت آن باشد
و چون از کبائر دست بداشت هرگذاه دیگر که بروی رود
این پنج نماز چون کفارت آن باشد و رسول صلی الله علیه
و سلم گفت مثل این پنج نماز چون جوی آب روشن است
که بدر سرای کسی میگذرد و او هرروز پنج بار بآن میشوید
ممکن بود که بروی هیچ شوح بماند گفتند یا رسول الله
گفت این پنج نماز گناه را همچنان ببرد که آب شوح را *

PERSIAN.

Fourth Paper.

Examiner—MUFTI M. ANWARUL HAQ, M.A.

Candidates are required to give their answers in their own words
as far as practicable.

The figures in the margin indicate full marks.

1. ‏عبارت ذیل را در فارسی یا انگریزی شرح‏ 15
دهید :—

(قَالَ لَهُ مُوسَى هَلْ اَتَّبِعُكَ عَلَى اَنْ تُعَلِّمَنِ مِمَّا عُلِّمْتَ
رُشْـــداً) اي صـوابا ارشد به و في قرأة بضـم الراء و
سكون الشين و سأله ذلک لان الزيادة فى العلم مطلوبة (قَالَ
اِنَّکَ لَنْ تَسْتَطِيعَ مَعِيَ صَبْراً وَ كَيْفَ تَصْبِرُ عَلَى بِمَا لَمْ
تُحِطْ بِهِ خُبْراً) فى الحديث السابق عقب هذه الاية

يا موسى اني علىٰ علم من علم الله علمنا به لا تعلمه

و انت على علم من علم الله علمك الله لا اعلمه و قوله

خبرا مصدر بمعنى لم تحط اي لم تخبر حقيقته (قَالَ

سَتَجِدُنِيْ اِنْ شَاءَ اللّٰهُ صَابِراً وَّ لَا أَعْصِيْ) اى وغير عاص

(لَكَ أَمْراً) تامرني به - و قيد بالمشيئة لانه لم يكن على

ثقة في نفسه فيما التزم - و هذه عادة الانبياء و الاولياء ان

لا يثقوا الى انفسهم طرفة عين (قَالَ فَاِنِ اتَّبَعْتَنِيْ فَلَا تَسْأَلْنِيْ)

و في قرأة بفتح اللام و تشديد النون (عَنْ شَيءٍ) تذكره مني

في علمك و اصبر (حَتّٰى أَحْدِثَ لَكَ مِنْهُ ذِكْراً) اي اذكره

لك بعلته فقبل موسى شرطه رعاية لادب المتعلم من العالم

(فَانْطَلَقَا) يمشيان على ساحل البحر (حَتّٰى اِذَا رَكِبَا فِي

السَّفِيْنَةِ) التي مرت بهما (خَرَقَهَا) الخضر بان اقتلع لوحا او

لوحين من جهة البحر بفأس لما بلغت اللج *

2.   5   (a) حديثى كه اندرين باب وارد شده و در كتاب

شما مذكور است بر سبيل اجمال بفارسي شرح دهيد *

5   (b) قرات ديگر لفظ "رُشْداً" چيست - و به خواندن

· "فلا تسألني" بفتح لام و تشديد نون در معنى چه فرق شود -

نيز بفرمائيد كه اين هر دو لفظ كدام صيغه دارند *

5   (c) قصهٔ اصحاب كهف را مختصراً بفارسي بيان كنيد *

3.   20   يكى از دو عبارت ذيل را در فارسي يا انگريزي

ترجمه بكنيد :——

(۱) و ما عدا ذلك فغاطري ابو عذره - و مقتضب حلوة

و مرة - و هذا مع اعترافي بان البديع رحمه الله سباق غايات

42

و صاحب آيات - و ان المتصدي بعده لانشاء مقامة - و لو
اوتي بلاغة قدامة لا يغترف الامن فضالته و لا يسرى ذلك
لمسرى الا بدلالته - و لله در القائل *

* بيت *

فلــو قبــل مبــكاها بكيت صبــابة
بسعدي شفيت النفس قبل التندم
و لكن بكت قبــلي فهيج لي البكا
بكاهــا فقلـت الفضـل للمتقدم

و ارجو ان لا اكون في هذا الهذر الذي اوردته و المورد
الذي توردته كالباحث عن حتفه بظلفه و الجادع مارن انفه
بكفه - فالحق بالاخسرين اعمالا الذين ضل سعيهم فى الحياة
الدنيا و هم يحسبون انهم يحسنون صنعا - على اني و ان
اغمض لي الفطن المتغابي و نضح عني المحب المحابي
لا اكاد اخلص من غمر جاهل اوذني غمر متجاهل *

(ب) و لبثنا على ذلك برهة ينشئ لي كل يوم نزهة
و يدرأ عن قلبي شبهة لي ان جدحت له يد الاملاق كأس
الفراق و اغراه عدم العراق بتطليق العراق و لفظته معاوز الارفاق
الى مفاوز الآفاق و نظمه في سلك الرفاق خفوق راية الاخفاق
فشحذ للرحلة غرار عزمته و ظعن يقتاد القلب بازمته *

* بيت *

فما راقني من لا تقني بعــد بعده
و لا شاقنــي من ساقنــي لوصاله

و لا لاح لي مذندند لفضــــله

و لا ذو خلال حاز مـــثــل خلاله

و استسر عني حينا و لا اعرف عرينا و لا اجد عنه مبينا ـ فلما ابت من غربتي الى منبت شعبتي حضرت دار كتبها التي هي منتدي المتأدبين و ملتقي القاطنين منهم و المتغربين ـ فدخل ذو لحية كثة و هيئة رثة فسلم على الجلاس و جلس في اخريات الناس ثم اخذ يبدي ما في و طابه و يعجب الحاضرين بفصل خطابه ـ فقال لمن يليه ما الكتاب الذي تنظر فيه *

4.   10   عبارت ذيل را با اعراب بنويسيد :ـ

و قد تزعم اليهود ان جميع ْما ثبت عندهم على ما فى التوريـة مما بين فيها من لدن خلق الله ادم الى وقت الهجرة و ذلك التوريـة التي هي في ايديهم اليوم اربعة الاف سنة و ستمائة سنة و اثنتان و اربعون سنة و قد ذكروا تفصيل ذلك بولادة رجل رجل و بني بني و موته من عهد ادم الى هجرة نبينا محمد صلعم و ساذكر تفصيل ذلك ان شاء الله و تفصيل غيرهم ممن فصله من علماء اهل الكتب و غيرهم من اهل العلم بالسير و اخبار الناس *

5.   10   (a) بحثى كه در تاينخ طبري درباره‌ٔ » مقدار جميع زمان از ابتدا تا انتها« وارد شده ـ خلاصهٔ آنرا بفارسي تحرير كنيد :ـ

5   (b) الفاظ ذيل كدام صيغه دارند مع تعليل آنها بنويسيد :ـ

اَبَتَّ ـ سَاَذْكُرُ ـ تُعَلِّمَنِ ـ لَمْ تُحِطْ ـ لَا يَثِقُوْا *

6. عبارت ذیل را در فارسي شرح نمائید :—

انها جزیرة في بحر العین و تتصل بجزائرزانج و المسیر الیها بالنجوم و انما سمیت بهذا الاسم لان بها شجرة لها ثمرة علی صور النساء معلقات من الشجرة بشعورها و اذا ادرکت یسمع منها صوت واق واق و اهل تلک البلاد یفهمون من هذا الصوت شیئا یتطیرون به - و قیل هي بلاد کثیرة الذهب حتی ان اهلها یتخذون سلاسل کلابهم و اطواق قرودهم من الذهب و یاتون بالقمصان المنسوجة من الذهب و حکی موسی بن المبارک السیرا في انه دخل هذه البلاد و قد ملکتها امراة و انه راها علی سریر عریانة و علی راسها تاج و عندها اربعة الاف و صیفة عراة ابکارا *

7. (a) جمع یا مفرد الفاظ ذیل بنویسید :—

نساء - شجرة - سلاسل - قرود - قمصان - سریر-تاج - عراة

(b) برخی از احوال صاحب معجم البلدان به فارسي بنگارید *

PERSIAN.

FIFTH PAPER.

Examiner—O. F. JENKINKS, ESQ., I.C.S.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate :—

رسیدگان قلۀ بصیرت را پوشیده نیست که تهذیب اخلاق ملل و تذهیب حال امم و تکمیل نقائص مملکت را در هر عهد

و زمان طریقی خاص و اقتضائی مخصوص است . این دورهٔ
طلائی و عهد نورانی که آفتاب علم و نور معرفت کران تا کران
عالم را احاطه کرده و باشندگان افریقای شمالی و امریکای
جنوبی را با هوش و فرهنگ ساخته و در جمیع ملل برخلاف
سلف افرادیکه بخواندن و نوشتن آشنا باشند زیاد شده مؤثر
ترین مواعظه حسنه و با نفوذ ترین نصایح پسندیده در سایهٔ
رسائلیکه محض تنقیح مراتب حقه و توضیع معایب واضحه
اشاعت یابد و طرق اصلاح . و نظائر آن به نیکو ترین وجهی
با الفاظ شیرین و عبارات نمکین و سخنان مفرح در طی امثلهٔ
معروفه و تلو حکایات مشهوره بیان شود *

2. Translate :—

35

نسیم خلد میوزد مگر ز جویبارها
که بوی مشک میدهد هوای مرغزارها

فراز خاک و خشتها دمیده سبز کشتها
چه کشتها بهشتها نه صد نه ده هزارها

به چنگ بسته چنگها به نای هشته زنگها
چکاوها کلنگها تذروها هزارها

زنای خویش فاخته دو صد اصول ساخته
ترانها نواخته چو زیر و بم تارها

ز خاک رسته لالها چو بسّدین پیالها
ببرگ لاله ژالها چو در شفق ستارها

فکنده اند همهمه کشیده اند زمزمه
بشاخ سروبن همه چه کبکها چه سارها

نسیـــم روضهٔ ارم جهــــد . بمغـــز دمبـــدم

ز بس دمیده پیش هم بطرف جویبــارها

بهــارها بنفشهــا شگـــوفهـا شقیقهــا

شمامهــا خجستهــا اراکهــا عرارهــا

ز هر کرانه مستهــا بدستهــا پیالهــها

ز مغز می پرستها نشانده می خمـــارها

ز ریزش سحابهــا بر آبهــا حبــابهــا

چو جوی نقرهٔ آبهــا روان در آبشـــارها

فراز سرو بوستــان نشستـــه اند قمـریان

چو مقریان نغـز خوان بزمردین منـارها

فکنده اند غلغلــه دو صد هزار یکـــدله

بشاخ گل پی گلــه ز رنج انتــظـارها

درختـــهــای بارور چو اشتــران بار بـر

همی ز پشت یکدگر کشیده صف قطارها

مهــارکش شمالشان سحــابها رحالشان

اصولشان عقالشــان فزوعشان مهــارها

NOTE.—*Only* FIVE *out of the following nine questions are to be attempted.*

3.   What are the sources of our knowledge of the Persian language 10 in the (a) Achaemenian, (b) Sasanian periods ?

4.   Illustrate the relationship of Sanskrit and Persian in the Aryan 10 family of languages.

5.   Translate and give the modern Persian forms of the following 10 Zend words and explain the phonetic changes undergone by each :— *brātar ; yavan ; zasta ; mahrka ; āp ; hvato ; spāda ; kaufa ; madhu ; pādha.*

6.   Give the meaning of each of the following words in Iranian 10 Persian and explain how it is commonly misused in Indian Persian :—

زر - سرکار - غریب - خراب - تکلیف - هوا - خفه - غُصّه -

حجّام - مشکور

7. Translate the following archaic words found in the Shahnama, 10 and give the modern equivalent of each :—

ازار - چک - دستور - ژرف - شید - کیهان - گوارژه - واژونه -

یله - خاور

8. Explain the general signification in relation to the root idea of 10 each of the eight derived forms of the Arabic Verbal noun used in Persian.

9. Translate and re-write with diacritical points (اعراب) :— 10

- موتمن - مستغنی - تعالی - ایما - اتصال - محیط - محتاج - مدارات - مصون - مذخنی .

Give the primary root of each of the above.

10. Translate and derive:— بیگلر - بازار - ارجمند - کنخدا - 10

.مرزبان - میرزا - خرچنگ - یکی - خانقاه - خانمان - خانواده

PERSIAN.

Sixth Paper.

Examiner—Aqa Muhammad Kazim Shirazi.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate very freely into idiomatic Persian :— 70

A.

This world-wide conflagration which we term War turns our thoughts to more sublime sentiments. Peace, peace, is spoken and debated everywhere. War has been from the Stone Age a vast preoccupation of man, and heartrending accounts are recorded as if, in the letters of human blood throughout history, wars are waged, peace declared and kept for a time, but the spirit of blood "survived in the belligerents like smoulding embers." It may be concluded from all that we see and hear to-day that war is inevitable. It is a phenomenon of the survival of the fittest, as the unvaried testimony of all ages and of all nations affirms. There is no piece in earthly concerns; for the world, with all the opulence of mirth and gaiety, is vacant and lacks in essentials of the soul. The world being so and we in such bewilderment, shall our souls be suffered to see the pungent contrast and feel the deception? Let us reflect and take a mental and spiritual retreat. We turn with disgust from all that is superficial and hollow and enter to seek solace in the spiritual zone.

The mind, a highest work of God, His mirror and representative, has guided our spiritual leader and it will guide us also. The mind, which is our chief distinction, can never be too reverently spoken of; and it is of mind that we wish to speak.

B.

When the question of the best agency to provide for the good of man is in view, the mind instinctively wanders to those sources of human happiness which ensure man's worldly well-being. From worldly well-being is understood the consensus of all those elements which make for human uplift in all the various branches of his activity. They include politics, the pursuit of arts, of war and peace, as much as those sides of human conduct which lead to his moral well-being. These sources are either Divine or human. In the former case, they take the form of the manifestations, of which the records exist, have always been distinguished from the product of every other agency in being of so universal an application as to defy all barriers of race, colour, and usage. This is the one great testimony of their origin in the great centre of all law. But perhaps they would differ in their individual character, assuming the form of this creed in one age, and reappearing in a different guise to meet the requirements of changed environments and times. It would call into play man's highest intelligence to discern the purest gem out of a whole mine of what passes for revelation, so persistent has been the effort of man to disfigure the result of Divine dispensation.

2. (*a*) What is Rhetoric ? What purpose does it serve in literature ? Define its scope in Persian.

(*b*) Give the true signification of the figure called مجاز مرسل. Classify its different varieties, and give examples.

(*c*) Define with examples طباق and تدریج and indicate the points of similarity between them.

3. Name and explain the figures in *any two* of the following :—

(*a*) نگـــه دار مـــا را ز راه خطـــا

خطـــا در گذار و صوابم نمـــا

(*b*) زلف آشفته و خوی کرده و خندان لب مست

پیرهن چاک و غزلخـــوان و صراحي در دست

نرگسش عربده جوی و لبش افســـوس کنـــان

نیم شب مست ببالیــــن من آمد بنشســـت

(*c*) علم بینش دهد به بیــــن دلرا

روح جنبـــش دهد ببیـــن گلرا

(d)

شود کوه آهـــن چو دریای آب

اگـــر بشنـــود نام افراسیـــاب

4. What do you understand by رکن ? Name and explain the essential parts of which it is composed. Give examples. **4**

5. State the rules observed in scansion regarding omission and insertion of the letters—الف - واو - یا ۔ ۀ and ن. Give examples. **5**

6. Explain any three of the following terms :—

ضرب - تشبیب - صدر - تسبیغ - دخیل - تاسیس

7. Scan one of the following and name the metre :— **3**

(a)

ای مه جبیـــن که یار دل آزاری

سویم نـــگاه کن ز ســـریـــاری

(b)

فغان کنان هر سحری بکوی تو میگذرم

چو نیست ره سوی تو ام ببام در مینگرم

PERSIAN.

SEVENTH PAPER.

Examiner—Z. R. ZAHID SUHRAWARDY, Esq., M.A., B.L.

Candidates are required to give their answers in their own words as far as practicable.

Answer any FIVE *questions of each of the Groups A and B.*

The questions are of equal value.

GROUP A.

HISTORY OF PERSIAN LITERATURE.

1. Trace the genesis of the Persian language, noting the impress on it of the various foreign conquests of Persia, with special reference to the influence of Arab domination on the language and literature of Persia.

2. What do you consider to be the Renaissance period of Persian literature ? Justify your answer by a review of the period preceding it and by a reference to the authors and their literary activities that marked the Renaissance.

3. Write a short discourse on the sources of the Shahnama, the persons who took part in its composition, and its style and purpose.

4. It is said that Jami was the last poet of the classical school. Refute or justify the assertion.

5. Name some Persian ' poets laureate,' noting their works and the Princes under whom they flourished.

6. Write what you know about the following works and their authors:—Kimia-i Sa'adat, Durra i-Nadira, Silsilatuzzahb, Chahar Maqala, Nal-Daman.

Review the life and works of Amir Khusro.

GROUP B.

MUSLIM HISTORY.

1. Describe the last great battle between the Arabs and the Persians which sealed the fate of Persia.

2. What was the Persian national standard (banner) at the time of the Arab conquest ? Describe the events that brought about its existence and loss.

3. Write short notes on ' the Companion of the Cave,' ' the Sword of God,' ' the Battle of the Camel,' ' Amirul Mominin,' ' Din-i-Ilahi.'

4. Give a short account of the reign of Sultan Sanjar.

5 When and how was the Khedival dynasty established in Egypt ?

6. Write a short note on the fiscal policy of Akbar.

7. When and by whom was the Nizamat of Bengal, Behar and Orissa founded ? Give a short history of it down to the loss of its sovereign authority.

PERSIAN.

EIGHTH PAPER.

Examiner—Z. R. ZAHID SUHRAWARDY, ESQ., M.A., B.L.

Candidates are required to give their answers in their own words as far as practicable.

Write an essay in English on *one* of the following subjects :—

(*a*) The Ismailias—their religious creed and origin, their place in Persian history, their different sects and the present-day followers of the creed in Asia and Africa.

(*b*) Influence of women in Islam and the part they have played in Muslim history.

(*c*) جنگ هفتاد و دو ملت همه را عذر بنه
چون ندیدند حقیقت ره افسانه زدند

GREEK.

FIRST PAPER.

Examiner—DR. H. STEPHEN, M.A., D.D.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. (*a*) Explain the plan and purpose of Herodotus in writing his history. What do you believe to have been the extent of the travels of Herodotus? Whom does he think to have been τὸν πρῶτον ὑπάρξαντα ἀδίκων ἔργων ἐς τοὺς Ἕλληνας? What does he say about the origin of the Ionian and Dorian races? What account does he give of the religion of the Persians? How was Babylon taken? **12**

Translate:—

(*b*) Ἐπεὶ ὦν δὴ ἐξεγέρθη ὁ Κῦρος, ἐδίδου λόγον ἑαυτῷ περὶ τῆς ὄψιος· ὡς δὲ οἱ ἐδόκεε μεγάλη εἶναι ἡ ὄψις, καλέσας Ὑστάσπεα καὶ ἀπολαβὼν μοῦνον εἶπε· Ὕστασπες, παῖς σὸς ἐπιβουλεύων ἐμοί τε καὶ τῇ ἐμῇ ἀρχῇ ἕαλωκε· ὡς δὲ ταῦτα ἀτρεκέως οἶδα, ἐγὼ σημανέω· ἐμεῦ θεοὶ κηδέαται, καί κοι πάντα προδεικνύουσι τὰ ἐπιφερόμενα· ἤδη ὦν ἐν τῇ παροιχομένῃ νυκτὶ εὕδων, εἶδον τῶν σῶν παίδων τὸν πρεσβύτατον ἔχοντα ἐπὶ τῶν ὤμων πτέρυγας· καὶ τουτέων τῇ μὲν τὴν Ἀσίην, τῇ δὲ τὴν Εὐρώπην ἐπισκιάζειν· οὔκων ἐστὶ μηχάνη ἀπὸ τῆς ὄψιος ταύτης οὐδεμία, τὸ μὴ κεῖνον ἐπιβουλεύειν ἐμοί· σὺ τοίνυν τὴν ταχίστην πορεύεο ὀπίσω ἐς πέρσας, καὶ ποίεε ὅκως ἐπεὰν ἐγὼ τάδε καταστρεψάμενος ἔλθω ἐκεῖ, ὥς μοι καταστήσῃς τὸν παῖδα ἐς ἔλεγχον.

Give the Attic forms of κηδέαται, πορεύεο, and ποίεε.

2. (*a*) What was the purpose of Thucydides in writing his history, and his opinion as to the use of history? Compare his method with that of Herodotus. Give the dates of the Peloponnesian War. In what year does the history break off? What is his purpose in introducing speeches? **12**

(*b*) Any *two* of the following:—

(1) Καὶ μεμνῆσθαι χρὴ ἡμᾶς ὅτι νεωστὶ ἀπὸ νόσου μεγάλης καὶ πολέμου βραχύ τι λελωφήκαμεν, ὥστε καὶ χρήμασι καὶ τοῖς σώμασιν ηὐξῆσθαι· καὶ ταῦτα ὑπὲρ ἡμῶν δίκαιον ἐνθάδε ἀναλοῦν, καὶ μὴ ὑπὲρ ἀνδρῶν φυγάδων τῶνδε ἐπικουρίας δεομένων, οἷς τό τε ψεύσασθαι καλῶς χρήσιμον καὶ τῷ τοῦ πέλας κινδύνῳ, αὐτοὺς λόγους μόνον παρασχομένους, ἢ κατορθωσάντας χάριν μὴ ἀξίαν εἰδέναι ἢ πταίσαντάς που τοὺς φίλους ξυναπολέσαι.

Explain historical allusions.

(2) Φήσει τις δημοκρατίαν οὔτε ξυνετὸν οὔτ' ἴσον εἶναι, τοὺς δ' ἔχοντας τὰ χρήματα καὶ ἄρχειν ἄριστα βελτίστους. ἐγὼ δέ φημι

πρῶτα μὲν δῆμον ξύμπαν ὠνομάσθαι, ὀλιγαρχίαν δὲ μέρος, ἔπειτα
φύλακας μὲν ἀρίστους εἶναι χρημάτων τοὺς πλουσίους, βουλεῦσαι δ'
ἂν βέλτιστα τοὺς ξυνετούς, κρῖναι δ' ἂν ἀκούσαντας ἄριστα τοὺς πολ-
λούς, καὶ ταῦτα ὁμοίως καὶ κατὰ τὰ μέρη καὶ ξύμπαντα ἐν δημοκρατίᾳ
ἰσομοιρεῖν. ἀλιγαρχία δὲ τῶν μὲν κινδύνων τοῖς πολλοῖς μεταδίδωσι.
τῶν δ' ὠφελίμων οὐ πλεονεκτεῖ μόνον, ἀλλὰ καὶ ξύμπαν ἀφελομένη
ἔχει.

Translate. State speaker and occasion. To which side do you
think that Thucydides inclined ?

(3) Τούτων ἐγὼ ἡδίω μὲν ἂν εἶχον ὑμῖν ἕτερα ἐπιστέλλειν, οὐ
μέντοι χρησιμώτερά γε, εἰ δεῖ σαφῶς ὑμᾶς εἰδότας τὰ ἐνθάδε βουλε-
ύσασθα, καὶ ἅμα τὰς φύσεις ἐπιστάμενος ὑμῶν, βουλομένων μὲν τὰ
ἥδιστα ἀκούειν, αἰτιωμένων δὲ ὕστερον, ἤν τι ὑμῖν ἀπ' αὐτῶν μὴ ὁμοῖον
ἐκβῇ, ἀσφαλέστερον ἡγησάμην τὸ ἀληθὲς δηλῶσαι.

Translate. Parse ἡδίω. To whom are these words addressed ?
How far was Nicias himself responsible for the disaster at Syracuse ?

(4) Ἔτυχον δὲ καὶ βρονταί τινες ἅμα γενόμεναι καὶ ὕδωρ, οἷα τοῦ
ἔτους πρὸς μετόπωρον ἤδη ὄντος φιλεῖ γίγνεσθαι· ἀφ' ὧν οἱ Ἀθηναῖοι
μᾶλλου ἔτι ἠθύμουν, καὶ ἐνόμιζον ἐπὶ τῷ σφετέρῳ ἀλέθρῳ καὶ ταῦτα
πάντα γίγνεσθαι. ἀναπαυομένων δ' αὐτῶν οἱ Συρακόσιοι πέμπουσι
μέρος τι τῆς στρατιᾶς ἀποτειχιοῦντας αὖ ἐκ τοῦ ὄπισθεν αὐτοὺς ᾗ
προεληλύθεσαν.

Translate. Explain the circumstances. Parse ἀποτειχιοῦντας.

3. (a) State briefly the chief argument of Leptines in favour of   13
his law, and the chief argument of Demosthenes against it. What
were λειτούργια ι and ἀτέλειαι ? The most striking characteristics of
Demosthenes were said to be μέγεθος and δεινότης; do you find these
exemplified in the orations read ?

(b) Any *two* of the following :—

(1) εἰ γὰρ οἱ μὲν εἰδότες καὶ παθόντες ἄξια τούτων ἐνόμιζον εὖ
πάσχειν, ἡμεῖς δ' οἱ λόγῳ ταῦτ' ἀκούοντες ὡς ἀναξίων ἀφαιρησόμεθα,
πῶς οὐχ ὑπέρδεινον ποιήσομεν; αὐτὸς τοίνυν ἐστί μοι λόγος οὗτος
καὶ περὶ τῶν τοὺς τετρακοσίους καταλυσάντων, καὶ περὶ τῶν ὅτ' ἔφευγεν
ὁ δῆμος χρησίμους αὐτοὺς παρασχόντων· πάντας γὰρ αὐτοὺς ἡγοῦμαι
δεινότατ' ἂν παθεῖν, εἴ τι τῶν τότε ψηφισθέντων αὐτοῖς λυθείη.

Translate. Explain the historical allusions.

(2) σκεψώμεθα δὴ τίνας ἡμῖν εἰσποιεῖ χορηγοὺς, εἰς ἐκείνας τὰς
λειτουργίας, καὶ πόσους, ἐὰν μὴ τούτῳ προσέχωμεν, ἀφήσει. οἱ μὲν
τοίνυν πλουσιώτατοι τριηραρχοῦντες ἀεὶ τῶν χορηγιῶν ἀτελεῖς ὑπάρ-
χουσιν, οἱ δ' ἐλάττω τῶν ἱκανῶν κεκτημένοι, τὴν ἀναγκαίαν ἀτέλειαν
ἔχοντες, ἔξω τοῦ τέλους εἰσὶ τούτου· οὐκοῦν τούτων μὲν οὐδετέρων
οὐδεὶς διὰ τὸν νόμον ἡμῖν προσέσται χορηγός.

Translate. Explain χορήγιαι and τριηράρχιαι.

(3) Καὶ δὴ κατὰ τοῦτο τὸ χωρίον, ὦ ἄνδρες δικασταί, γενομένης ἐπομβρίας συνέθη τὸ ὕδωρ ἐμβαλεῖν, ἀμεληθὲν δὲ, οὔπω τοῦ πατρὸς ἔχοντος αὐτό, ἀλλ' ἀνθρώπου δυσχεραίνοντος ὅλως τοῖς τόποις καὶ μᾶλλον ἀστικοῦ, δὶς καὶ τρὶς ἐμβαλὸν τὸ ὕδωρ τά τε χωρί' ἐλυ, ἡ ατο καὶ μᾶλλον ὡδοποίει. διὸ δὴ ταῦθ' ὁ πατὴρ ὁρῶν, ὡς ἐγὼ τῶν εἰδότων ἀκούω, καὶ τῶν γειτόνων ἐπινεμόντων ἅμα καὶ βαδιζόντων διὰ τοῦ χωρίου, τὴν αἱμασιὰν περιῳκοδόμησε ταύτην.

Translate. Explain briefly the dispute between Kallikles and Tisias, and how Demosthenes settled it.

4. (a) Sketch Plato's view as to what constitutes a liberal educa- 20 tion, explaining especially his view of the importance of Geometry in education. State his opinion with regard to Homer and the poets, and the reasons which he gives for it.

(b) Any *three* of the following :—

(1) Καὶ ἐγώ τε καὶ ὁ Πολέμαρχος δείσαντες διεπτοήθημεν· ὁ δ' εἰς τὸ μέσον φθεγξάμενος Τίς, ἔφη, ὑμᾶς πάλαι φλυαρία ἔχει, ὦ Σώκρατες; καὶ τί εὐηθίζεσθε πρὸς ἀλλήλους ὑποκατακλινόμενοι ὑμῖν αὐτοῖς; ἀλλ' εἴπερ ὡς ἀληθῶς βούλει εἰδέναι τὸ δίκαιον ὅ τι ἔστι, μὴ μόνον ἐρώτα μηδὲ φιλοτιμοῦ ἐλέγχων, ἐπειδάν τίς τι ἀποκρίνηται, ἐγνωκὼς τοῦτο, ὅτι ῥᾷον ἐρωτᾶν ἢ ἀποκρίνεσθαι, ἀλλὰ καὶ αὐτὸς ἀπόκριναι καὶ εἰπὲ τί φῂς εἶναι τὸ δίκαιον· καὶ ὅπως μοι.

Translate. Who is the speaker here, and what is the doctrine which he maintains so fiercely ?

(2) ἐστὲ μὲν γὰρ δὴ πάντες οἱ ἐν τῇ πόλει ἀδελφοί, ὡς φήσομεν πρὸς αὐτοὺς μυθολογοῦντες, ἀλλ' ὁ θεὸς πλάττων, ὅσοι μὲν ὑμῶν ἱκανοὶ ἄρχειν, χρυσὸν ἐν τῇ γενέσει ξυνέμιξεν αὐτοῖς, δι ὃ τιμιώτατοί εἰσιν· ὅσοι δ' ἐπίκουροι, ἄργυρον· σίδηρον δὲ καὶ χαλκὸν τοῖς τε γεωργοῖς καὶ τοῖς ἄλλοις δημιουργοῖς. ἅτε οὖν ξυγγενεῖς ὄντες πάντες τὸ μὲν πολὺ ὁμοίους ἂν ὑμῖν αὐτοῖς γεννῷτε, ἔστι δ' ὅτε ἐκ χρυσοῦ γεννηθείη ἂν ἀργυροῦν καὶ ἐξ ἀργύρου χρυσοῦν ἔκγονον καὶ τἆλλα πάντα οὕτως ἐξ ἀλλήλων.

Translate. Explain what Plato means by a μῦθος, and what use he makes of μῦθοι in his philosophy.

(3) Πάλιν τοίνυν, ἦν δ' ἐγώ, λέγωμεν, ὡς ἐξ ὀλιγαρχικοῦ δημοκρατικὸς γίγνεται. φαίνεται δέ μοι τά γε πολλὰ ὧδε γίγνεσθαι. Πῶς; Ὅταν νέος τεθραμμένος, ὡς νῦν δὴ ἐλέγομεν, ἀπαιδεύτως τε καὶ φειδωλῶς γεύσηται κηφήνων μέλιτος, καὶ ξυγγένηται αἴθωσι θηρσὶ καὶ δεινοῖς, παντοδαπὰς ἡδονὰς καὶ ποικίλας καὶ παντοίας ἐχούσας δυναμένοις σκευάζειν, ἐνταῦθά που οἴου εἶναι ἀρχὴν αὐτῷ μεταβολῆς ὀλιγαρχικῆς τῆς ἐν ἑαυτῷ εἰς δημοκρατικήν.

Translate. Sketch Plato's opinion of democracy and the individual character corresponding to it.

(4) Οὐκ οὖν τιθῶμεν ἀπὸ Ὁμήρου ἀρξαμένους πάντας τοὺς ποιητικοὺς μιμητὰς εἰδώλων ἀρετῆς εἶναι καὶ τῶν ἄλλων περὶ ὧν ποιοῦσι, τῆς δὲ ἀληθείας οὐχ ἅπτεσθαι, ἀλλ' ὥσπερ νῦν δὴ ἐλέγομεν, ὁ ζωγρά-

φος σκυτοτόμον ποιήσει δοκοῦντα | εἶναι, αὐτός τε οὐκ ἐπαΐων περὶ σκυτοτομίας καὶ τοῖς μὴ ἐπαΐουσιν, ἐκ τῶν χρωμάτων δὲ καὶ σχημάτων θεωροῦσιν; Πάνυ μὲν οὖν. Οὕτω δή, οἶμαι, καὶ τὸν ποιητικὸν φήσομεν χρώματ' ἄττα ἑκάστων τῶν τεχνῶν τοῖς ὀνόμασι καὶ ῥήμασιν ἐπιχρωματίζειν αὐτὸν οὐκ ἐπαΐοντα ἀλλ' ἢ μιμεῖσθαι.

Translate. Do you think this a correct view of the nature of poetry—that it is wholly μίμησις ?

5. (a) Explain Aristotle's view of the relation between Politics 13 and Ethics and the purpose of each. What does he consider to be τὸ ἄριστον, and what difficulty does he find in defining it ? What is the precise meaning of ἀρετη, and the distinction between ἀρετη ἠθική and διανοητική, and the way of cultivating each ? What is the importance of τὸ μέσον ?

(b) Translate any *two* of the following:—

(1) περὶ δὲ τῆς εὐδαιμονίας, τί ἐστιν, ἀμφισβητοῦσι καὶ οὐχ ὁμοίως οἱ πολλοὶ τοῖς σοφοῖς ἀποδιδόασιν. οἱ μὲν γὰρ τῶν ἐναργῶν τι καὶ φανερῶν, οἷον ἡδονὴν ἢ πλοῦτον ἢ τιμήν, ἄλλοι δ' ἄλλο, πολλάκις δὲ καὶ ὁ αὐτὸς ἕτερον· νοσήσακ μὲν γὰρ ὑγίειαν;, πενόμενος δὲ πλοῦτον· συνειδότες δ' ἑαυτοῖς ἄγνοιαν τοὺς μέγα τι καὶ ὑπὲρ αὐτοὺς λέγοντας θαυμάζουσιν.

(2) οἱ στρατιῶται δὲ δειλοὶ γίνονται, ὅταν ὑπερτείνῃ ὁ κίνδυνος καὶ λείπωνται τοῖς πλήθεσι καὶ ταῖς παρασκευαῖς· πρῶτοι γὰρ φεύγουσι, τὰ δὲ πολιτικὰ μένοντα ἀποθνήσκει, ὅπερ κἐπὶ τῷ Ἑρμαίῳ συνέβη. τοῖς μὲν γὰρ αἰσχρὸν τὸ φεύγειν και ὁ θάνατος τῆς τοιαύτης σωτηρίας αἱρετώτερος· οἱ δὲ καὶ ἐξ ἀρχῆς ἐκινδύνευον ὡς κρείττους ὄντες, γνόντες δὲ φεύγουσι, τὸν θάνατον μᾶλλον τοῦ αἰσχροῦ φοβούμενοι· ὁ δ' ἀνδρεῖος οὐ τοιοῦτος.

(3) ἐν δὲ ταῖς ὁμιλίαις καὶ τῷ συζῆν καὶ λόγων καὶ πραγμάτων κοινωνεῖν οἱ μὲν ἄρεσκοι δοκοῦσιν εἶναι, οἱ πάντα πρὸς ἡδονὴν ἐπαινοῦντες καὶ οὐθὲν ἀντιτείνοντες, ἀλλ' οἰόμενοι δεῖν ἄλυποι τοῖς ἐντυγχάνουσιν εἶ οι· οἱ δ' ἐξ ἐναντίας τούτοις πρὸς πάντα ἀντιτείνοντες καὶ τοῦ λυπεῖν οἰδ' ὁτιοῦν φραντίζοντες δύσκολοι καὶ δυσέριδες καλοῦνται.

(4) αἱ δὲ κατ' ἀρετὴν πράξεις καλαὶ καὶ τοῦ καλοῦ ἕνεκα. καὶ ὁ ἐλευθέριος οὖν δώσει τοῦ καλοῦ ἕνεκα καὶ ὀρθῶς, καὶ ταῦτα ἡδέως ἢ ἀλύπως· τὸ γὰρ κατ' ὀρετὴν ἡδὺ ἢ ἄλυπον, ἥκιστα δὲ λυπηρόν ὁ δὲ διδοὺς οἷς μὴ δεῖ, ἢ μὴ τοῦ καλοῦ ἕνεκα ἀλλὰ διὰ τιν' ἄλλην αἰτίαν, οὐκ ἐλευθέριος ἀλλ' ἄλλος τίς ῥηθήσεται, οὐδ' ὁ λυπηρῶς· μᾶλλον γὰρ ἕλοιτ ἂν τὰ χρήματα τῆς καλῆς πράξεως, τοῦτο δ' οὐκ ἐλευθερίου.

6. Translate any *three* of the following passages:—　　　　30

(a) *When Xenophon took the fort of the Taochi.*

Πάντες γὰρ οὗτοι ἀντεποιοῦντο ἀρετῆς, καὶ διηγωνίζοντο πρὸς ἀλλήλους· καὶ οὕτως ἐρίζοντες αἱροῦσι τὸ χωρίον. Ὡς γὰρ ἅπαξ εἰσέδραμον, οὐδεὶς πέτρος ἄνωθεν ἠνέχθη. Ἐνταῦθα δὴ δεινὸν ἦν θέαμα. Αἱ γὰρ γυναῖκες, ῥίπτουσαι τὰ παιδία, εἶτα καὶ ἑαυτὰς ἐπι-

κατερρίπτουν, καὶ οἱ ἄνδρες ὡσαύτως. Ἔνθα δὴ καὶ Αἰνείας Στυμ-
φάλιος, λοχαγὸς, ἰδών τινα θέοντα ὡς ῥίψοντα·ἑαυτὸν, στολὴν ἔχοντα
καλὴν, ἐπιλαμβάνεται ὡς κωλύσων· Ὁ δὲ αὐτὸν ἐπισπᾶται. καὶ
ἀμφότεροι ᾤχοντο κατὰ τῶν πετρῶν φερόμενοι, καὶ ἀπέθανον. Ἐντεῦ-
θεν ἄνθρωποι μὲν πάνυ ὀλίγοι ἐλήφθησαν, βόες δὲ καὶ ὄνοι πολλοὶ
καὶ πρόβατα.

(b) *Demosthenes argues that a man is born for the service of his
country.*

ἡγεῖτο γὰρ αὐτῶν ἕκαστος, οὐχὶ τῷ πατρὶ καὶ τῇ μητρὶ πόνον
γεγενῆσθαι, ἀλλὰ καὶ τῇ πατρίδι. διαφέρει δὲ τί; ὅτι ὁ μὲν τοῖς
γονεῦσι μόνον γεγενῆσθαι νομίζων τὸν τῆς εἰμαρμένης καὶ τὸν αὐτό-
ματον θάνατον περιμένει, ὁ δὲ καὶ τῇ πατρίδι ὑπὲρ τοῦ μὴ ταύτην
ἐπιδεῖν δουλεύουσαν ἀποθνήσκειν ἐθελήσει, καὶ φοβερωτέρας ἡγήσεται
τὰς ὕβρεις καὶ τὰς ἀτιμίας, ἃς ἐν δουλευούσῃ τῇ πόλει φέρειν ἀνάγκη,
τοῦ θανάτου.

(c) *Socrates tells the true story of his life.*

οὐδὲν γὰρ ἄλλο πράττων ἐγὼ περιέρχομαι ἢ πείθων ὑμῶν καὶ νεωτέ-
ρους καὶ πρεσβυτέρους μήτε σωμάτων ἐπιμελεῖσθαι μήτε χρημάτων
πρότερον μηδὲ οὕτω σφόδρα ὡς τῆς ψυχῆς, ὅπως ὡς ἀρίστη ἔσται,
λέγων ὅτι οὐκ ἐκ χρημάτων ἀρετὴ γίγνεται, ἀλλ' ἐξ ἀρετῆς χρήματα
καὶ τἆλλα ἀγαθὰ τοῖς ἀνθρώποις ἅπαντα καὶ ἰδίᾳ καὶ δημοσίᾳ.

(d) *Plato teaches that i. is impossible to escape from the justice of
heaven.*

ταύτης τῆς δίκης οὔτε σὺ μή ποτε οὔτε [εἰ] ἄλλος ἀτυχὴς γενό-
μενος ἐπεύξηται περιγενέσθαι θεῶν· οὐ γὰρ ἀμεληθήσει ποτὲ ὑπ' αὐτῆς·
οὐχ οὕτω σμικρὸς ὢν δύσει κατὰ τὸ τῆς γῆς βάθος, οὐδ' ὑψηλὸς
γενόμενος εἰς τὸν οὐρανὸν ἀναπτήσει, τίσεις δὲ αὐτῶν τὴν προσήκου-
σαν τιμωρίαν εἴτ' ἐνθάδε μένων εἴτε καὶ ἐν Ἅιδου διαπορευθεὶς εἴτε καὶ
τούτων εἰς ἀγριώτερον ἔτι διακομισθεὶς τόπον.

GREEK.

SECOND PAPER.

*Examiner—*Dr H STEPHEN, M.A., D.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. It is believed that the Homeric poems were composed near the   3
close of the Bronze Age : give reasons for the belief, stating the vari-
ous metals and their uses, that are mentioned in the poems. Are

there any reasons for thinking the *Iliad* and *Odyssey* to be by different authors ? Do you find in the poems any allusions to the art of writing, or the use of the riding horse ?

2. Answer (*a*) and (*e*) and *any two* of the other questions. 24

(*a*) αὐτίκα δ' ἐξ ὄρεος κατεβήσετο παιπαλόεντος
κραιπνὰ ποσὶν προβιβάς· τρέμε δ' οὔρεα μακρὰ καὶ ὕλη
ποσσὶν ὑπ' ἀθανάτοισι Ποσειδάωνος ἐόντος.
τρὶς μὲν ὀρέξατ' ἰών, τὸ δὲ τέτρατον ἵκετο τέκμωρ,
Αἰγάς, ἔνθα δέ οἱ κλυτὰ δώματα βένθεσι λίμνης
χρύσεα μαρμαίροντα τετεύχαται, ἄφθιτα αἰεί.
ἔνθ' ἐλθὼν ὑπ' ὄχεσφι τιτύσκετο χαλκόποδ' ἵππω
ὠκυπέτα, χρυσέησιν ἐθείρησιν κομόωντε

Translate. Parse τετεύχαται, τιτύσκετο and ὄχεσφι. Longinus quotes these lines as one example of ὕψος ; what do you think of them ? State the part played by Poseidon in the *Iliad* and *Odyssey*.

(*b*) ὣς Τρῶες καὶ 'Αχαιοὶ ἐπ' ἀλλήλοισι θορόντες
δηίουν, οὐδ' ἕτεροι μνώοντ' ὀλοοῖο φόβοιο.
πολλὰ δὲ Κεβριόνην ἀμφ' ὀξέα δοῦρα πεπήγει
ἰοί τε πτερόεντες ἀπὸ νευρῆφι θορόντες,
πολλὰ δὲ χερμάδια μελάλ' ἀσπίδας ἐστυφέλιξαν
μαρναμένων ἀμφ' αὐτόν· ὁ δ' ἐν στροφάλιγγι κονίης
κεῖτο μέγας μεγαλωστί, λελασμένος ἱπποσυνάων.

Translate. Parse πεπήγει, μεγαλωστί, and λελασμένος. Scan the last three lines.

(*c*) αἵματί οἱ δεύοντο κόμαι Χαρίτεσσιν ὁμοῖαι
πλοχμοί θ', οἳ χρυσῷ τε καὶ ἀργύρῳ ἐσφήκωντο.
οἷον δὲ τρέφει ἔρνος ἀνὴρ ἐριθηλὲς ἐλαίης
χώρῳ ἐν οἰοπόλῳ, ὅθ' ἅλις ἀναβέβρυχεν ὕδωρ,
καλὸν τηλεθάον· τὸ δέ τε πνοιαὶ δονέουσιν
παντοίων ἀνέμων, καί τε βρύει ἄνθεϊ λευκῷ·
ἐλθὼν δ' ἐξαπίνης ἄνεμος σὺν λαίλαπι πολλῇ
βόθρου τ' ἐξέστρεψε καὶ ἐξετάνυσσ' ἐπὶ γαίῃ·

Translate. Derive ἐριθηλές and οιοπόλῳ. To whom do the lines refer ? Remark on the character of Homeric similes.

(*d*) παρθενικαὶ δὲ καὶ ἠίθεοι ἀταλὰ φρονέοντες
πλεκτοῖς ἐν ταλάροισι φέρον μελιηδέα καρπόν.
τοῖσιν δ' ἐν μέσσοισι πάις φόρμιγγι λιγείῃ
ἱμερόεν κιθάριζε, λίνον δ' ὑπὸ καλὸν ἄειδεν
λεπταλέῃ φωνῇ· τοὶ δὲ ῥήσσοντες ἁμαρτῇ
μολπῇ τ' ἰυγμῷ τε ποσὶν σκαίροντες ἕποντο.

Translate. Explain the context of these lines. What was λίνον ?

(*e*) τὸν δ' ὁ γέρων Πρίαμος πρῶτος ἴδεν ὀφθαλμοῖσιν,
παμφαίνονθ' ὥς τ' ἀστέρ' ἐπεσσύμενον πεδίοιο,
ὅς ῥά τ' ὀπώρης εἶσιν, ἀρίζηλοι δέ οἱ αὐγαὶ
φαίνονται πολλοῖσι μετ' ἀστράσι νυκτὸς ἀμολγῷ,

ὅν τε κύν' Ὡρίωνος ἐπίκλησιν καλέουσιν·
λαμπρότατος μὲν ὅ γ' ἐστί, κακὸν δέ τε σῆμα τέτυκται,
καί τε φέρει πολλὸν πυρετὸν δειλοῖσι βροτοῖσιν·
ὧς τοῦ χαλκὸς ἔλαμπε περὶ στήθεσσι θέοντος.

Translate. Explain the force of the articles here, and the signifi-
cance of the simile. What is said about Orion in the *Odyssey*?

(*f*) καὶ τά γε χρυσείην ἐς λάρνακα θῆκαν ἑλόντες,
πορφυρέοις πέπλοισι καλύψαντες μαλακοῖσιν·
αἶψα δ' ἄρ' ἐς κοίλην κάπετον θέσαν, αὐτὰρ ὕπερθεν
πυκνοῖσιν λάεσσι κατεστόρεσαν μεγάλοισιν·
ῥίμφα δὲ σῆμ' ἔχεαν, περὶ δὲ σκοποὶ ἥατο πάντη,
μὴ πρὶν ἐφορμηθεῖεν ἐυκνήμιδες Ἀχαιοί.

Translate. Explain the context. Is there any reason for thinking
that B. XXIV is a later addition?

3. Answer (*c*) and (*e*) and *any two* of the other question. 24

(*a*) οὐ γάρ τοι πρὶν μοῖρα φίλους τ' ἰδέειν καὶ ἱκέσθαι
οἶκον ἐς ὑψόροφον καὶ σὴν ἐς πατρίδα γαῖαν.
πρίν γ' ὅτ' ἂν Αἰγύπτοιο διιπετέος ποταμοῖο
αὖτις ὕδωρ ἔλθῃς, ῥέξῃς θ' ἱερὰς ἑκατόμβας
ἀθανάτοισι θεοῖσι, τοὶ οὐρανὸν εὐρὺν ἔχουσιν.
καὶ τότε τοι δώσουσιν ὁδὸν θεοί ἣν σὺ μενοινᾶς.

Translate. Explain the context. Write a note on the etymology
of διιπετέος.

(*b*) βῆ ῥ' ἴμεν εἰς ὕλην· τὴν δὲ σχεδὸν ὕδατος εὗρεν
ἐν περιφαινομένῳ· δοιοὺς δ' ἄρ' ὑπήλυθε θάμνους,
ἐξ ὁμόθεν πεφυῶτας· ὁ μὲν φυλίης, ὁ δ' ἐλαίης.
τοὺς μὲν ἄρ' οὔτ' ἀνέμων διάει μένος ὑγρὸν ἀέντων,
οὔνε ποτ' ἠέλιος φαέθων ἀκτῖσιν ἔβαλλεν,
οὔτ' ὄμβρος περάασκε διαμπερές· ὣς ἄρα πυκνοὶ
ἀλλήλοισιν ἔφυν ἐπαμοιβαδίς·

Translate. State the context. Parse διάει and περάασκε.

(*c*) Κῆρυξ δ' ἐγγύθεν ἦλθεν ἄγων ἐρίηρον ἀοιδόν,
τὸν πέρι Μοῦσ' ἐφίλησε, δίδω δ' ἀγαθόν τε κακόν τε.
ὀφθαλμῶν μὲν ἄμερσε, δίδω δ' ἡδεῖαν ἀοιδήν.
τῷ δ' ἄρα Ποντόνοος θῆκε θρόνον ἀργυρόηλον
μέσσῳ δαιτυμόνων, πρὸς κίονα μακρὸν ἐρείσας,
κὰδ δ' ἐκ πασσαλόφιν κρέμασεν φόρμιγγα λίγειαν
αὐτοῦ ὑπὲρ κεφαλῆς καὶ ἐπέφραδε χερσὶν ἑλέσθαι,
κῆρυξ· πάρ δ' ἐτίθει κάνεον καλήν τε τράπεζαν,

Translate. What opinion has this passage given rise to with re-
gard to Homer? Who were the *rhapsodes*?

(*d*) ὡς δ' ὅτ' ἂν ἄγραυλοι πόριες περὶ βοῦς ἀγελαίας,
ἐλθούσας ἐς κόπρον, ἐπὴν βοτάνης κορέσωνται,

πᾶσαι ὅμα σκαίρουσιν ἐναντίαι· οὐδ' ἔτι σηκοὶ
ἴσχουσ', ἀλλ' ἀδινὸν μυκώμεναι ἀμφιθέουσιν
μητέρος· ὡς ἐμὲ κεῖνοι, ἐπεὶ ἴδον ὀφθαλμοῖσιν,
δακρυόεντες ἔχυντο·

Translate. Explain the simile and its context.

(e) ἀλλά με σός τε πόθος σά τε μήδεα, φαίδιμ' 'Οδυσσεῦ,
σή τ' ἀγανοφροσύνη μελιηδέα θυμὸν ἀπηύρα.
῝Ως ἔφατ', αὐτὰρ ἐγώ γ' ἔθελον φρεσὶ μερμηρίξας
μητρὸς ἐμῆς ψυχὴν ἑλέειν κατατεθνηυίης.
τρὶς μὲν ἐφωρμήθην, ἑλέειν τέ με θυμὸς ὀνώγει,
τρὶς δέ μοι ἐκ χειρῶν σκιῇ εἴκελον ἢ καὶ ὀνείρῳ
ἔπτατ'· ἐμοὶ δ' ἄχος ὀξὺ γενέσκετο κηρόθι μᾶλλον,

Translate. Where is the spirit-world situated according to Homer?
Compare later theories. What is said about Achilles in the spirit-world?

4. The poems of Theocritus are commonly called Idylls: explain 14
this word. They are mainly *pastoral* and *epic*: mention what you
consider to be the best pastoral, and the best epic Idyll. Give some
account of the one ' piscatory ' Idyll contained in the collection.

(a) ΑΙΠ. ἅδιον, ὦ ποιμὰν, τὸ τεὸν μέλος, ἢ τὸ καταχὲς
τῆν' ἀπὸ τᾶς πέτρας καταλείβεται ὑψόθεν ὕδωρ.
αἴκα ταὶ Μῶσαι τὰν οἴιδα δῶρον ἄγωνται,
ἄρνα τὺ σακίταν λαψῇ γέρας· αἰ δέ κ' ἀρέσκῃ
τήναις ἄρνα λαβεῖν, τὺ δὲ τὰν ὄιν ὕστερον ἀξῇ.
ΘΥΡ. λῇς, ποτὶ τᾶν Νυμφᾶν, λῇς, αἰπόλε, τεῖδε καθίξας,
ὡς τὸ κάταντες τοῦτο γεώλοφον, ᾇ τε μυρῖκαι,
συρίσδεν; τὰς δ' αἶγας ἐγὼν ἐν τῷδε νομευσῶ.

Translate. In what dialect are these poems written? Give the
Attic forms of the words in the first three lines.

(b) Σιμιχίδα, πᾷ δὴ τὺ μεσαμέριον πόδας ἕλκεις,
ἀνίκα δὴ καὶ σαῦρος ἐφ' αἱμασιαῖσι κοθεύδει,
οὐδ' ἐπιτυμβίδιοι κορυδαλλίδες ἠλαίνοντι;
ἢ μετὰ δαῖτα κλητὸς ἐπείγεαι; ἤ τινος ἀστῶν
λανὸν ἐπιθρώσκεις; ὡς τεῦ ποσὶ νισσομένοιο
πᾶσα λίθος πταίοισα ποτ' ἀρβυλίδεσσιν ἀείδει.

Translate. Compare the Cyclops of Theocritus with the Cyclops
of Homer. Mention some modern Idylls, Pastoral and Epic.

5. Translate the following passages (unprepared):— 30
(a) Hector foresees the future fate of Andromache.

εὖ γὰρ ἐγὼ τόδε οἶδα κατὰ φρένα καὶ κατὰ θυμόν·
ἔσσεται ἦμαρ ὅτ' ἄν ποτ' ὀλώλῃ ῎Ιλιος ἱρὴ
καὶ Πρίαμος καὶ λαὸς ἐυμμελίω Πριάμοιο.
ἀλλ' οὔ μοι Τρώων τόσσον μέλει ἄλγος ὀπίσσω,

οὔτ' αὐτῆς Ἑκάβης οὔτε Πριάμοιο ἄνακτος
οὔτε κασιγνήτων, οἵ κεν ποθέες τε, καὶ ἐσθλοὶ
ἐν κονίῃσι πέσοιεν ὑπ' ἐνδράσι δυσμενέεσσιν,
ὅσσον σεῦ ὅτε κέν τις Ἀχαιῶν χαλκοχιτώνων
δακρυόεσσαν ἄγηται, ἐλεύθερον ἦμαρ ἀπούρας·
καί κεν ἐν Ἄργει ἐοῦσα, πρὸς ἄλλης ἱστὸν ὑφαίνοις.
καὶ κεν ὕδωρ φορέοις Μεσσηίδος ἢ Ὑπερείης,
πόλλ' ἀεκαζομένη, κρατερὴ δ' ἐπικείσετ' ἀνάγκη·
καί ποτέ τις εἴπῃσιν, ἰδὼν κατὰ δάκρυ χέουσαν·
Ἕκτορος ἥδε γυνή ὃς ἀριστεύεσκε μάχεσθαι
Τρώων ἱπποδάμων, ὅτε Ἴλιον ἀμφεμάχοντο.

(b) Ulysses reveals himself to the suitors.

Αὐτὰρ ὁ γυμνώθη ῥακέων πολύμητις Ὀδυσσεύς,
ἆλτο δ' ἐπὶ μέγαν οὐδόν, ἔχων βιὸν ἠδὲ φαρέτρην
ἰῶν ἐμπλείην, ταχέας δ' ἐκχεύατ' ὀϊστοὺς
αὐτοῦ πρόσθε ποδῶν, μετὰ δὲ μνηστῆρσιν ἔειπεν
Οὗτος μὲν δὴ ἄεθλος ἀάατος ἐκτετέλεσται·
νῦν αὖτε σκοπὸν ἄλλον, ὃν οὔ πω τις βάλεν ἀνήρ,
εἴσομαι, αἴ κε τύχωμι, πόρῃ δέ μοι εὖχος Ἀπόλλων.

GREEK.

THIRD PAPER.

Examiner—Dr H Stephen, M.A., D.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Of the Greek plays which you have read, which do you consider   6
to be the greatest, and why ? How does Aristophanes characterise
each of the tragedians ? Quote as many of his lines concerning them
as you can.

2. (1) Name the different plays on the subject of the Atridae. Is   8
unity of time preserved in the *Agamemnon* ? Compare the story of
Agamemnon as implied in the play, and as told in the *Odyssey*.

(2) Either (*a*) or (*b*).

(a) ἐν νυκτὶ δυσκύμαντα δ' ὠρώρει κακά·
ναῦς γὰρ πρὸς ἀλλήλαισι Θρῄκιαι πνοαὶ
ἤρεικον· αἱ δὲ κεροτυπούμεναι βίᾳ
χειμῶνι, τυφῶ ξὺν ζάλη τ' ὀμβροκτύπῳ,
ᾤχοντ' ἄφαντοι ποιμένος κακοῦ στρόβῳ.
ἐπεὶ δ' ἀνῆλθε λαμπρὸν ἡλίου φάος

ὁρῶμεν ἀνθοῦν πέλαγος Αἰγαῖον νεκροῖς
ἀνδρῶν Ἀχαιῶν ναυτικῶν τ' ἐρειπίων.

Translate. Who is the speaker? Derive the compound words.
Scan the first three lines.

(b) Κ. Ἀ ποῖ ποτ' ἤγαγές με; πρὸς ποίαν στέγην;
   Χ. Πρὸς τὴν Ἀτρειδῶν· εἰ σὺ μὴ τόδ' ἐννοεῖς,
      ἐγὼ λέγω σοι· καὶ τάδ' οὐκ ἐρεῖς ψύθη.
   Κ. Μισόθεον μὲν οὖν, πολλὰ συνίστορα
      αὐτόφονα κακὰ καὶ ἀρτάνας,
      ἀνδρὸς σφαγεῖον καὶ πέδον ῥαντήριον.
   Χ ἜΟικεν εὔριν ἡ ξένη κυνὸς δίκην
      εἶναι, ματεύει δ' ὧν ἀνευρήσει φόνον,
   Κ. Μαρτυρίτοισι γὰρ τοῖσδ' ἐπιπείθομαι·
      κλαιόμενα τάδε βρέφη, σφαγὰς,
      ὀπτάς τε σάρκας, πρὸς πατρὸς βεβρωμένας.

Translate. Explain the circumstances, and the story of the
speaker. Scan the last three lines.

3. (1) Give what you consider to be the etymology of the name   8
Prometheus. Sketch briefly the theory of the gods on which the play
is founded. Show how Aeschylus's Prometheus and Shelley's Pro-
metheus differ in purpose.

(2) Either (a) or (b).

(a) φέρ' ὅπως ἄχαρις χάρις, ὦ φίλος, εἰπὲ, ποῦ τίς ἀλκά;
   τίς ἐφαμερίων ἄρηξις; οὐδ' ἐδέρχθης
   ἀλιγοδρανίαν ἄκικυν,
   ἰσόνειρον, ᾇ τὸ φωτῶν
   ἀλαὸν γένος ἐμπεποδισμένον; οὔποτε θνατῶν
   τὰν Διὸς ἁρμονίαν ἀνδρῶν παρεξίασι βουλαί.
   ἔμαθον τάδε σὰς ἠροσιδοῦσ' ὀλοὰς τύχας, Προμηθεῦ.

Translate. Show how these lines bring out the moral of the play.

(b) τοιόνδε μόχθου τέρμα μή τι προσδόκα,
   πρὶν ἂν θεῶν τις διάδοχος τῶν σῶν πόνων
   φανῇ, θελήσῃ τ' εἰς ἀναύγητον μολεῖν
   Ἅιδην κνεφαῖά τ' ἀμφὶ Ταρτάρου βάθη.
   πρὸς ταῦτα βούλευ'· ὡς ὅδ' οὐ πεπλασμένος
   ὁ κόμπος, ἀλλὰ καὶ λίαν εἰρημένος·
   ψευδηγορεῖν γὰρ οὐκ ἐπίσταται στόμα
   τὸ Δῖον, ἀλλὰ πᾶν ἔπος τελεῖ.

Translate, and write a note on this passage.

4. (1) Show the connection of the Theban plays of Sophocles. It   8
has been said that the favourite subject of Greek tragedy is a great
man struggling against Fate. Comment on this.

(2) Either (a) or (b).

(a) ΧΟ. ἀλλ' οὐξελέγχων αὐτὸν ἔστιν· οἶδε γὰρ
      τὸν θεῖον ἤδη μάντιν ὧδ' ἄγουσιν, ᾧ
      τἀληθὲς ἐμπέφυκεν ἀνθρώπων μόνῳ·

ΟΙ. ὦ πάντα νωμῶν Τειρεσία, διδακτά τε
ἄρρητά τ᾽, οὐράνιά τε καὶ χθονοστιβῆ,
πόλιν μέν, εἰ καὶ μὴ βλέπεις, φθονεῖς δ᾽ ὅμως
οἵᾳ νόσῳ σύνεστιν· ἧς σε προστάτην
σωτῆρά τ᾽, ὦναξ, μοῦνον ἐξευρίσκομεν.

Translate, and write the scansion of the first three lines, marking the caesuras.

(b) οἶμαι γὰρ οὔτ᾽ ἂν Ἴστρον οὔτε Φᾶσιν ἂν
νίψαι καθαρμῷ τήνδε τὴν στέγην, ὅσα
κεύθει, τὰ δ᾽ αὐτίκ᾽ εἰς τὸ φῶς φανεῖ κακὰ
ἑκόντα κοὐκ ἄκοντα. τῶν δὲ πημονῶν
μάλιστα λυποῦσ᾽ αἳ φανῶσ᾽ αὐθαίρετοι

Translate, and quote from a modern poet. In what sense were the crimes of Oedipus αὐθαίρετοι? Scan three lines, marking the caesuras.

5. (1) The tragedy of *Antigone* turns on a conflict of duties;　8
show how. Which in your opinion is right—Kreon or Antigone?
Quote or give the substance of the lines describing the supremacy
of moral law.

(2) Either (a) or (b).

(a) ἀλλὰ γὰρ ἁ μεγαλώνυμος ἦλθε Νίκα
τᾷ πολυαρμάτῳ ἀντιχαρεῖσα Θήβᾳ.
ἐκ μὲν δὴ πολέμων
τῶν νῦν θέσθε λησμοσύναν,
θεῶν δὲ ναοὺς χοροῖς
παννυχίοις πάντας ἐπέλθωμεν, ὁ Θήβας δ᾽ ἐλελίχθων
Βάκχιος ἄρχοι.

Translate, and scan the first two lines.

(b) βωμοὶ γὰρ ἡμῖν ἐσχάραι τε παντελεῖς
πλήρεις ὑπ᾽ οἰωνῶν τε καὶ κυνῶν βορᾶς
τοῦ δυσμόρου πεπτῶτος Οἰδίπου γόνου
κᾆτ᾽ οὐ δέχονται θυστάδας λιτὰς ἔτι
θεοὶ παρ᾽ ἡμῶν οὐδὲ μηρίων φλόγα,
οὐδ᾽ ὄρνις εὐσήμους ἀπορροιβδεῖ βοάς,
ἀνδροφθόρου βεβρῶτες αἵματος λίπος.

Translate, and give the context.

6. (1) State briefly the purpose and teaching of the *Bacchae*.　8
(2) Either (a) or (b).

(a) Βάκχας ποτνιάδας εἰσιδών, αἳ τῆσδε γῆς
οἴστροισι λευκὸν κῶλον ἐξηκόντισαν,
ἥκω φράσαι σοὶ καὶ πόλει χρῄζων, ἄναξ,
ὡς δεινὰ δρῶσι θαυμάτων τε κρείσσονα.
θέλω δ᾽ ἀκοῦσαι, πότερά σοι παρρησίᾳ
φράσω τὰ κεῖθεν ἢ λόγον στειλώμεθα·

(b) πρῶτον μὲν οὖν ποιηρὸν ἵζομεν νάπος,
τά τ᾽ ἐκ ποδῶν σιγηλὰ καὶ γλώσσης ἄπο

σώζοντες, ὡς ὁρῶμεν οὐχ ὁρώμενοι
ἦν δ' ἄγκος ἀμφίκρημνον, ὕδασι διάβροχον,
πεύκαισι συσκιάζον, ἔνθα Μαινάδες
καθῆντ', ἔχουσαι χεῖρας ἐν τερπνοῖς πόνοις.

Translate, and explain the context of these passages.

7. (1) What is peculiar about the manner in which Euripides be- 8
gins his plays ? What is meant by *Deus ex Machina*, and where does
it occur ?

(2) Either (a) or (b).

(a) οἱ τόνδε πλεκτὸν στέφανον ἐξ ἀκηράτου
λειμῶνος, ὦ δέσποινα, κασμήσυις φέρω,
ἔνθ' οὔτε ποιμὴν ὀξιοῖ φέρβειν βοτὰ
οὔτ' ἦλθέ πω σίδηρος ἀλλ' ἀκήρατον
μέλισσα λειμῶν' ἠρινὸν διέρχεται·
Αἰδὼς δὲ ποταμίαισι κηπεύει δρόσοις.

(b) ἔνθεν τις ἠχὼ χθόνιος ὡς βροντὴ Διὸς
βαρὺν βρόμον μεθῆκε, φρικώδη κλύειν·
ὀρθὸν δὲ κρᾶτ' ἔστησαν οὖς τ' εἰς οὐρανὸν
ἵπποι· παρ' ἡμῖν δ' ἦν φόβος νεανικὸς
πόθεν ποτ' εἴη φθόγγος. ἐς δ' ἁλιρρόθους
ἀκτὰς ἀποβλέψαντες ἱρὸν εἴδομεν
κῦμ' οὐρανῷ στηρίζον, ὥστ' ἀφῃρέθη
Σκείρωνος ἀκτὰς ὄμμα τοὐμὸν εἰσορᾶν·

Translate, and describe the context briefly. Aristophanes quotes
a line of this play as encouraging sophistical equivocation: give the
line and its context.

8. (1) Explain briefly the new forms of thought burlesqued in the 8
Clouds. Quote any line descriptive of the new theology. Is the
sketch of Socrates historical ?

(2) Either (a) or (b).

(a) Παρθένοι ὀμβροφόροι,
ἔλθωμεν λιπαρὰν χθόνα Παλλάδος, εὔανδρον γᾶν
Κέκροπος ὀψόμεναι πολυήρατον·
οὗ σέβας ἀρρήτων ἱερῶν, ἵνα
μυστοδόκος δόμος
ἐν τελεταῖς ἁγίαις ἀναδείκνυται,
ἦρί τ' ἐπερχομένῳ Βρομία χάρις,
εὐκελάδων τε χορῶν ἐρεθίσματα,
καὶ Μοῦσα βαρύβρομος αὐλῶν.

(b) ΔΙΚ. ἀλλ' οὖν ταῦτ' ἐστὶν ἐκεῖνα
ἐξ ὧν ἄνδρας Μαραθωνομάχους ἡμὴ παίδευσις ἔθρεψεν.
σὺ δὲ τοὺς νῦν εὐθὺς ἐν ἱματίοισι διδάσκεις ἐντετυλίχθαι·
πρὸς ταῦτ', ὦ μειράκιον, θαρρῶν ἐμὲ τὸν κρείττω λόγον αἱροῦ·
κἀπιστήσει μισεῖν ἀγορὰν καὶ βαλανείων ἀπέχεσθαι
καὶ τοῖς αἰσχροῖς αἰσχύνεσθαι κἂν σκώπτῃ τίς σε, φλέγεσθαι·

Translate, and compare briefly the old style of education with the
new here described.

9. State briefly the purpose and plan of the *Frogs*. The author 8
accuses Euripides of debasing the poetic art : in what ways ?

(a) Ἔνθεν δὴ στοματουργὸς ἐπῶν βασανίστρια λίσπη
γλῶσσ' ἀνελισσομένη, φθονερούς κινοῦσα χαλινούς,
ῥήματα δαιομένη καταλεπτολογήσει
πλευμόνων πολὺν πόνον.

(b) ἐπίσχες οὗτος, ὦ·πολυτίμητ' Αἰσχύλε,
ἀπὸ τῶν χαλάζῶν δ', ὦ πονηρ' Εὐριπίδη,
ἄναγε σεαυτὸν ἐκποδών, εἰ σωφρονεῖς,
ἵνα μὴ κεφαλαίῳ τὸν κρόταφόν σου ῥήματι
θενὼν ὑπ' ὀργῆς ἐκχέῃ τὸν Τήλεφον·
σὺ δὲ μὴ πρὸς ὀργήν, 'Αἰσχύλ', ἀλλὰ πράονως
ἔλεγχ', ἐλέγχου· λοιδορεῖσθαι δ'. οὐ πρέπει
ἄνδρας ποιητὰς ὥσπερ ἀρτοπώλιδας.

Translate. What poet is described in (a) ? Scan any two lines of
(b) and point out how the comic differs from the tragic senarius.

10. Translate (unprepared).
(a) *Oedipous describes the variability of human fortunes :—*

ΟΙ. ὦ φίλτατ' Αἰγέως παῖ, μόνοις οὐ γίγνεται
θεοῖσι γῆρας οὐδὲ κατθανεῖν ποτε,
τὰ δ' ἄλλα συγχεῖ πάνθ' ὁ παγκρατῆς χρόνος.
φθίνει μὲν ἰσχὺς γῆς, φθίνει δὲ σώματος,
θνήσκει δὲ πίστις, βλαστάνει δ' ἀπιστία,
καὶ πνεῦμα ταὐτὸν οὔποτ' οὔτ' ἐν ἀνδράσιν
φίλοις βέβηκεν οὔτε πρὸς πόλιν πόλει.
τοῖς μὲν γὰρ ἤδη, τοῖς δ' ἐν ὑστέρῳ χρόνῳ
τὰ τερπνὰ πικρὰ γίγνεται καὖθις φίλα.

(b) *Theseus shows that good predominates over evil in this world :—*

Η. ἄλλοισι δὴ 'πόνησ' ἁμιλληθεὶς λόγῳ
τοιῷδ'. ἔλεξε γάρ τις ὡς τὰ χείρονα
πλείω βροτοῖσίν ἐστι τῶν ἀμεινόνων.
ἐγὼ δὲ τούτοις ἀντίαν γνώμην ἔχω,
πλείω τὰ χρηστὰ τῶν κακῶν εἶναι βροτοῖς·
εἰ μὴ γὰρ ἦν τόδ', οὐκ ἂν ἦμεν ἐν φάει.
αἰνῶ δ' ὃς ἡμῖν βίοτον ἐκ πεφυρμένου
καὶ θηριώδους θεῶν διεσταθμήσατο,
πρῶτον μὲν ἐνθεὶς σύνεσιν, εἶτα δ' ἄγγελον
γλῶσσαν λόγων δούς, ὥστε γιγνώσκειν ὄπα.

GREEK.

FOURTH PAPER.

Examiner—DR. H. STEPHEN, M.A., D.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

Translate any *four* of the following passages into Greek :—

(a) Nicias saw that his soldiers were discouraged by having been, contrary to wont, defeated in their ships; but saw also that, on account of scarcity of provisions, they were eager to face the coming danger as soon as possible. Therefore when all things were ready, he called them together and first encouraged them, and spoke to this effect. Soldiers of Athens and of its allies, the coming contest will be a struggle for safety and country to us no less than to the enemy. If we conquer now with our ships, it will be possible for any one of you to see his native place again. Therefore you must not be down-hearted, nor feel (suffer) what only inexperienced soldiers feel when, having been unsuccessful in their first encounters, they are rendered hopeless by small reverses. But the Athenians here present who have had experience of many wars, and the allies who have served along with them, can remember well the unexpected (vicissitudes) which occur in war. Be ye prepared therefore to renew the struggle in a way worthy of the great multitude which you see gathered here for the coming contest.

(b) It is said that Gyges, the ancestor of the Lydian kings, attained his power in this way : He was a shepherd in the service of the then ruler of Lydia. There was a great storm and an earthquake, and some part of the ground was burst open, and a chasm made its appearance at the place where he was tending his flock. Seeing and wondering he went down, and saw, besides other things, wonderful to tellers of stories, a horse of brass, hollows and having doors. Peeping through them he saw, inside, a dead body larger, as it seemed, than human. The body had nothing else but on one hand a finger ring. Seizing the ring he issued forth. On the customary assembly of the shepherds being held, that they might report to the king the affairs of their flocks, Gyges came and sat among the rest, having the ring on his finger. As he sat he happened to turn the catch ($\sigma\phi\epsilon\nu\delta\acute{o}\nu\eta$) of the ring towards the inside of his hand, and found that, on doing this, he became invisible to those sitting beside him, and that on turning it outwards he became visible again. Perceiving this he got himself to be chosen as one of their messengers to the king.

(c) Herodotus tells us that, when Xerxes was at Abydos, he saw certain ships laden with corn from the Pontus passing through the Hellespont on their way to Aegina and the Peloponnesus. Those who were near him, having heard that the ships belonged to the enemy, were eager to capture them, and, fixing their eyes on the king, watched when he would give the order. But Xerxes asked his attendants where the ships were sailing to. They answered that the ships were conveying corn to his enemies. Then the king answering said, Why then should we stop them ? Are we not about to sail to the same place to which these men are sailing, and shall we not require corn and other things ? What harm then can they do to us by carrying for us the very things which we shall require in the place to which we are going ? Indeed he not only allowed the Greek ships to pass, but sent away un-

harmed the Greek spies who had been arrested while surveying his army. He thought that, by telling what they had seen, they would not benefit, but rather terrify the Greeks.

(*d*) Certainly, Socrates said, but, still, tell me this much. What do you think to be the greatest good of having possessed such great wealth ? One, he answered, regarding which I could not easily convince others. You know, Socrates, that when one is near to thinking himself about to die, fear and anxiety enter into his mind regarding things which never entered into his thought before. For all the so-called myths regarding the things of the invisible world. though laughed at hitherto, as that those who have done wrong here must suffer punishment there—these stories now rise, and torture his mind (with the fear) that they may be true. And either from the weakness of old age, or from being now nearer to the affairs of that other world, he now sees things more clearly than before. He therefore comes to be full of suspicion, and reflects and looks back (to see) if he has wronged anyone in anything ; and finding many wrong-doings in his life, he lives in fear, and often starts up from sleep as children do. To him who is thus conscious of wrong-doing, sweet hope, the kindly nurse of age, as Pindar charmingly calls her, is never present.

(*e*) The Sophists considered rhetoric to be the art of making the worse appear the better reason, and thereby convincing judges that a bad suit was a good one ; and they themselves offered to teach the art for large sums of money. A certain Meonius went to a Sophist who promised to teach him if he would pay a certain large sum. The Sophist continued to teach him for a year, and after that he sent to him and demanded payment. Meonius gave no reply. Then, after various attempts, the Sophist summoned him before the judges who asked him whether it was not just that the Sophist should receive his pay after so much trouble. Meonius answered : I promised to pay this money if the Sophist should teach me the art of persuasion. Now I am going to try to convince you that he has taught me nothing. If I succeed in doing that, then by agreement I am not bound to pay. And if I do not succeed in convincing you, then the contract is unfulfilled, and by law I shall owe him nothing. Thus the cleverness of the Sophist was turned against himself.

GREEK.

Fifth Paper.

Examiner—Rev. Dr. G. Howells, M.A., Ph.D., B.D., B.Litt.

Candidates are required to give their answers in their own words as far as practicable.

Answer any five *questions.*

All questions carry equal marks.

1. Discuss from the historical and comparative standpoints the origin and character of the Greek Alphabet.

2. Enumerate and give the more important characteristics of the chief Greek dialects.

3. Classify the Indo-Germanic languages, and note how they differ from other languages.

4. Write an historical review of the progress made during the last hundred years or so, in the scientific study of language, and in the formulation of the principles of modern philology as a science.

5. Enumerate, explicate and present in tabular form the more important sounds in Indo-Germanic speech, with more especial reference to Greek.

6. " Of all the phonetic peculiarities of a language, accent is the most important." Expand and expound this statement.

7. Explain and illustrate in detail the philological laws called after the names of Grimm, Grassmann and Verner respectively.

8. Review the history of the case-suffixes in Indo-Germanic speech, with special reference to Greek.

9. Sketch, with illustrative examples, the history of verb-formation in Greek.

10. To what extent are the principles of Comparative Philology applicable to Sanskrit in its relation to the Indian vernaculars? Discuss this question.

GREEK.

SIXTH PAPER.

Examiner—REV. DR. G. HOWELLS, M.A., PH.D., B.D., B.LITT.

*Candidates are required to give their answers in their own words
as far as practicable.*

N.B—*Answer only* FIVE *questions.*

All questions carry equal marks.

1. Give a survey of the more important memorials and examine the character and range of early Aegean civilization, and discuss the question how far the Greek invaders may have shared in it.

2. " The two great achievements of the aristocratic age are the planting of Greek cities in lands far beyond the limits of the Aegean Sea and the elaboration of political machinery." Expound this statement, noting specially the causes, character and extent of Greek colonization.

3. Review the origin and development of the early Spartan state, and its institutions, and trace the growth of tendencies favourable to Hellenic unity.

4. " The battle of Plataea shares with Salamis the dignity of being decisive battles in the world's history." Fully explain and justify this statement.

5. Write a critical review of the growth, decline and downfall of the Athenian Empire.

6. Give an account of the origin, progress and results of the Peloponnesian War.

7. Relate the episode of the Ten Thousand, and note the significance of the adventure in the history of Greece.

8. Write a descriptive account of the Syracusan Empire and the struggle with Carthage.

9. Describe and account for the rise of Macedon under Philip.
10. Write a critical sketch of the career of Alexander the Great.
11. Estimate in detail the world's debt to Greek civilization.
12. Give a descriptive sketch of social life in ancient Athens.

GREEK.

SEVENTH PAPER.

Examiner—REV. DR. G. HOWELLS, M.A., PH.D., B.D., B.LITT.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer any FIVE *questions.*

All questions carry equal marks.

1. Write a critical review of the Homeric question.
2. Indicate the main contents and note the characteristic features of the Histories of Herodotus. Compare him as a historical writer with Thucydides.
3. Trace the historical growth of the Greek drama.
4. Give an account of the life and literary activity of Aeschylus, and discuss his characteristic ways of looking at life.
5. Summarise the contents of any three of the plays of Sophocles and indicate the main features of his dramatic genius.
6. "Euripides is a mixture of realist and mystic." Discuss this statement with illustrative references to his plays.
7. "At the present day Aristophanes seems to share with Homer and Aeschylus and Theocritus the power of appealing directly to the interest and sympathy of almost every reader." Justify this statement.
8. Give an account of the leading events in the life of Plato, and review the chief features of his philosophy. Compare his system of thought with that of Aristotle.
9. Discuss the character and value of Greek oratory, more especially in relation to the speeches of Demosthenes.
10. "There is hardly anything in the pastoral poetry of the world that does not come from Theocritus." Expound this statement, and write a critical review of the poetry of Theocritus.

GREEK.

EIGHTH PAPER.

Examiner—REV. DR. G. HOWELLS, M.A., PH.D., B.D., B.LITT.

Write an Essay on *one* of the following subjects:—
(1) The origin and development of Religion in Ancient Greece and in Ancient India.

(2) Greek democracy—its principles, achievements and failures.

(3) Greek ideals of education in the light of modern conditions.

(4) The Athens of Pericles and its lessons for the life of our day.

(5) The Greek and Sanskrit Languages and Literatures. A comparison and a contrast.

(6) Greek and Sanskrit dramas. A comparative study.

COMPARATIVE PHILOLOGY.

FIRST PAPER.

Examiner—DR. I. J. S. TARAPOREWALA, B.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Candidates are to choose any FIVE *questions.*

All questions carry equal marks.

1. What is the function of analogy in the building up of a   20
language ? In what various ways does this principle work ? Illustrate
by examples from Sanskrit and other languages. Can you justify the
term " false analogy " ?

2. Discuss fully what is understood by the term " language "; and   20
point out how far Comparative Philology takes cognisance of the vari-
ous significations of this word. Can animals possess language ?

3. " The sentence, not the word, is the unit of language." Dis-   20
cuss this theory.

4. What are the sounds postulated to have existed in the original   20
Indo-European ? Give their full classification and a short history of
the various steps by which the present classification of the I.E. con-
sonants was arrived at.

5. What is understood by the terms : Dissimilation, Prothesis,   20
Anaptyxis, and Metathesis ? Give some examples. What are, in your
opinion, the causes of these phenomena ?

6. What is the difference between sonants and consonants ?   20
What are " long sonants " ? How do you account for the forms like
गत: by the side of forms like गन्तुम् both from the root गम् ?

7. What is the importance of accent in a language ? It is held   20
that in the history of a language the pitch and the stress accent is
alternately the stronger. Illustrate this statement.

8. What is the importance of the discoveries of Grassmann and of   20
Verner regarding Phonology ?

9. What is the meaning of the word " Semantics" ? Give a clear   20
idea of the province and the methods of this branch of the Science of
language.

10. How far is a study of Psychology essential for the Science of   20
Language ? Treat this question from the point of view of Semantics
specially.

COMPARATIVE PHILOLOGY.

SECOND PAPER.

*Examiner—*DR. MARK COLLINS.

Candidates are required to give their answers in their own words as far as practicable.

SIX *questions to be attempted.*

Maximum Marks: 100.

1. Write a short note upon the development of comparative and superlative formations in the Indo-European family of languages.

2. Show, with particular reference to Indo-European, how pronominal inflexion may affect that of nouns and adjectives.

3. Compare and comment upon the formation of secondary verbal bases in Indo-European and in any two other important linguistic groups.

4. Explain and illustrate by means of examples the terms *apposition*, *composition* and *suffixation* used by André Lefévre with regard to the formation of words.

5. Characterize and give illustrative examples of the morphological peculiarities of the main primitive languages of America.

6. Assign to their respective linguistic groups and write a brief note upon each of the following languages:—Oscan, Manx, Brahui, Coptic, Pazend, Maori, Zulu, Frisian, Kawi, Hausa.

7. Write a note upon the non-Indo-European languages existing in Europe at the present day.

8. Explain and illustrate the terms (1) *analogy*, (2) *emphasis*, (3) *laziness*, as applied to the phenomena of change in language.

9. Make clear and illustrate how a synthetic language may pass into an analytic stage. Would you consider such a process indicative of intellectual advance ?

10. " An impartial study of the morphological development of language makes it tolerably certain that all inflectional languages must once have been isolating and have passed through the agglutinative stage." Write a brief discussion of this statement.

COMPARATIVE PHILOLOGY.

THIRD PAPER.

*Examiner—*AMRITA RAO, ESQ.

Candidates are required to give their answers in their own words as far as practicable.

SIX *questions to be attempted.*

Maximum Marks: 100.

1. What indications are discernible as to the antecedents of language in the human race ?

2. " Just as it was Sanskrit which laid the foundation of comparative philology, so, too, it was the hymns of the Rig Veda, the oldest monument

of Sanskrit literature, which laid the foundation of comparative mytho-
logy." Illustrate and comment upon this statement.

3. What light does comparative philology throw upon the social condi-
tions of the primitive Indo-European community ? What precautions
have to be observed in applying linguistic data to such problems ?

4. To what extent has the study of folk-lore contributed to compara-
tive philology ?

5. Write a note upon the influences at work in the origin of dialects,
and in their development into distinct languages.

6. Comment illustratively upon the influences which race may exert
upon language.

7. Illustrate clearly the fact that community of race has little to do
with community of language.

8. Briefly consider the question as to whether the primitive descriptive
elements in language were of a nominal or verbal character.

9. Discuss the question as to the relation of the personal terminations
of verbs to the personal pronouns.

10. Briefly sketch the history of the science of comparative philology
from the time of Jakob Grimm to the present day, with special reference
to the work of Bopp, Pott, Schleicher, Johannes Schmidt and Fick.

COMPARATIVE PHILOLOGY.

Fourth Paper.

Examiner—Mahamahopadhyaya Dr. S. C. Vidyabhushan,
M.A., Ph.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer any six of the following questions.

All the questions carry equal marks.

1. (a) Give a complete classification of the sounds represented respec-
tively by the Sanskrit, Prākrit and Pāli alphabets.
　　(b) Define the following terms:—
　　　　śvara-bhakti, svarita, and samvṛta.

2. (a) Examine and illustrate the statement that " a sound etymology
has nothing to do with sound."
　　(b) Comment on the following observation :—
　　" The linguals are non-original series of sounds derived perhaps from
the aboriginal languages of India."

3. (a) Name and illustrate the principal varieties of the Prākrit dialect.
Write what you know about Vārendrī Bhāṣā.
　　(b) Give the Prākrit equivalents of the following Sanskrit words:—
　　　　śayyā, araṇya, sphaṭika and trayodaśa.

4. (a) Give instances of the following in Prākrit:—
The nine consonants—k, g, ch, j, t, d, p, y, and v—when single and non-
initial, are generally elided.
　　(b) The letters l, v and r are always elided, whether they stand
first or last in a conjunct in Prākrit.

5. (a) Give the equivalents of the following Sanskrit words in the Paiśāchī dialect :—

rājā, gaganam, iva, kanyā, kāryyam and hṛdayaṁ.

(b) Decline " yad" (यद्) in Sanskrit and its corresponding stems in Prākrit and Pāli in the ablative case, to point out the mutual changes of sound in the three languages.

6. (a) How is Sanskrit ṛ (ऋ) represented in Pāli ? Support your answer with examples.

(b) Write notes on the nasal vowels in Pāli.

7. Give instances of the following in Pāli :—

(a) A vowel at the beginning of a word is often dropped ; a vowel in the middle of a word is often elided ; and a vowel is often added in the beginning of a word.

(b) A consonant is often added at the beginning of a word ; a consonant is often dropped in the beginning of a word ; and in the middle of a word a consonant is often elided.

8. (a) Give five instances of the following : " Some stems in Sanskrit which are desiderative in form have lost the peculiarity of desiderative meaning and assumed the value of independeṇt roots."

(b) Put the accent on "indra-śatru" (इन्द्रशत्रु) according as it is a possessive or a dependent compound.

9. (a) Give the meanings of the following Prākrit words and explain their formation :—

vihunduo, poālo, paṁsu, ṇhāviya, kāūṇa, vāvado, ṇedum and gadna.

(b) Give the meanings of the following Pāli words and explain their formation :—

pātihera, tekiccha, yebhuyya, kosajja, visūka, paheṇaka, pahatvāna, and bhonte.

10. (a) Translate the following into Sanskrit and into its corresponding Prākrit and Pāli :—

I shall stand.   He is angry.   Why are you agitated ?

(b) Identify the dialect of the following verse and translate it into English :—

> lahuko vata me kāyo
> phuṭṭho ca pītisukhena vipulena,
> tūlam iva eritaṁ mālutena
> pilavati va me kāyo' ti.

COMPARATIVE PHILOLOGY.

FIFTH PAPER.

Examiner—DR. S. K. BELVALKAR.

Candidates are required to give their answers in their own words as far as practicable.

Pāli and Prākrit, as well as Sanskrit, may be written either in Roman or in Devanāgarī characters.

Candidates are permitted to attempt SIX questions only.

The questions carry equal marks, but in judging the answers quality rather than quantity will be taken into consideration.

1. "Although the Prākrits are lineally descended from Classical Sanskrit there are yet certain changes in Prākrit that are highly reminiscent of the corresponding forms in Vedic Sanskrit. The latter is strikingly the case in Pāli."—Cite some half a dozen instances of forms of nouns as well as verbs in support of this statement.

2. "Pāli, and especially the several varieties of the Prākrit, exhibit certain words, forms and constructions that have nothing to correspond to them either in the Classical or in the Vedic Sanskrit; these therefore must be assumed to point to an admixture with some foreign or non-Aryan forms of speech."—Justify or criticise this statement, giving illustrations.

3. "As Mahāvīra and the Buddha lived in the same region and at about the same time, it is not very likely that the languages in which they spoke would materially differ from each other: and *if* we could assume that the languages of the Jain and Pāli canon represent those languages, it follows that there is no vital difference between the two." Discuss this statement, and in the light of your conclusion comment upon the following forms and expressions italicised :—
imāni bhante dhamma-*paliyāyāni*[:—] Vinayasamukase *Aliyavasāni* Anāgata-bhayāni Munigāthā Moneya-sūte Upatisa-pasino e ca *Lāghulovāde* musāvādaṁ *adhigicya* Bhagavatā Budhena bhasite[.]   [Bhabra Edict.]

4. Illustrate the workings of analogy in determining the declension and conjugation of nouns and verbs in Pāli *or* in Jaina Māgadhī.

5. Decline *any two* of the following words in Vedic and Classical Sanskrit, in Pāli, and in Mahārāṣṭri *or* Śaurasenī, adding explanatory or critical morphological notes where called for :—**वयम्, आत्मन, बाड, चतुर्** (fem.), and **दधिन्** .

6. Conjugate, in the tenses and moods indicated, *any two* of the following verbs in Vedic and Classical Sanskrit, in Pāli, and in Mahārāṣṭri *or* Śaurasenī, adding explanatory or critical morphological notes where called for : —**वन** (Imperative), **जन** (Perfect), **इष** (Future), **कृ** (Aorist), and **श्रु** (Passive).

7. Identify the following forms, giving (as the case may be) their equivalents in Vedic or Classical Sanskrit, in Pāli and in *any one* variety of the Prākrit other than that of the form itself :—

वल्वी, ग्रविल्वी, स्वीणाम्, सक्का, सेय्यणा, कीष, विम्हरिश भरिञ्जउ, and **हुवीग्रदि** .

8. Write a short note on the (i) formation and (ii) use of the Subjunctive in the Veda, indicating at the same time traces of its survival in Classical Sanskrit, in Pāli, and in the Prākrits.

9. Discuss the changes in the (i) scope and (ii) use of the Ātmanepada from the period of the Saṁhitās and the Brāhmaṇas, through the Classical Sanskrit, on to Pāli and the Prākrits.

10. Turn the following sentences into regular Classical Sanskrit, commenting upon such forms and constructions in the last four extracts as might enable one to determine the variety of the language employed :—

(i)
सो य्रंग् यंजे शग्ग्मे च मर्तों
यस्त् यानंट् समिधां द्व्यदांतिसु ।
य यांङ्ग् तिं परि वेद नमोंभि-
विंश्बेत वांसा दंघते त्वोतः ॥

(ii)
दहरा च हि बुद्धा च सब्बे मच्चुपरायना ।
श्रद्धा चेव दलिद्दा च ये बाला ये च पंण्डिता ॥
फलानमिव पक्कानं निच्चं पपतना भयम् ।
एवं जातानं मच्चानं निच्चं मरणतो भयम् ॥

(iii)
Jaï honti guṇā to kiṁ kuleṇa, guṇino
  kuleṇa na hu kajjaṁ |
Kulam akalaṅkaṁ guṇavajjiyāṇa guruyaṁ
  chiya kalaṅkaṁ ||

(iv) सुट्ठु क्व वुव्वदि । श्रक्कन्दसमुट्ठिदा पउमिणी श्रवज्ज्झ्रो वाणिग्ग्रो
श्रचोरो सुवखग्गारो श्रकलङ्खो गामसमागमो श्रलुद्धा गबिध्रा
त्ति तुक्करं एदे सम्माठोश्रन्ति ।

(v) किं भणह—'एसे सलयागदवच्छले श्रसणो जीविदमेत्तस्स
कालये हदिसं श्रकज्ज' ण कलिस्सदि' त्ति ।

श्रज्जा सेव हि श्रवधालेइ से सुहां गदिं । किं दाणिं तुम्हाणं एत्थ
पडिश्रारविश्रारेण ।

COMPARATIVE PHILOLOGY.

SIXTH PAPER.

Examiner—B. C. MAJUMDAR, ESQ.

*Candidates are required to give their answers in their own words
as far as practicable.*

SIX *questions only to be attempted, of which not more than* TWO
to be selected from among questions 8, 9 *and* 10.

*Bengali words should in all cases be phonetically transcribed
into Roman characters.*

1. Discuss the question of elision of medial stops (voiceless and voiced)
in Prakrit, and adduce copious examples from Old and Modern Bengali
to show that elision was a characteristic feature of the spoken dialects of
the pre-vernacular period. How would you explain forms like *rāi, gaa*
in Literary Prakrit, although the corresponding forms in all the Indo-
Aryan vernaculars are *rāti* or *rāt*, and *gaja* or *gaj* ?

2. Trace the history of the Indo-Aryan (Sanskrit) *y* through the
Prakrit and Apabhramsa into Bengali. What are the rules for the *j*
pronounciation of *y*, or its elision, in *tatsama* words in Modern Bengali ?
Write a note on the Bengali letters য, য় with reference to Old and
Modern Bengali phonetics.

3. Give instances of vowel aphæresis, syncope and apocope in *tad-
bhava* words in Bengali.

How are medial *i* and *u* treated in Modern Bengali ?

4. Write a short essay on the sound of the Bengali অ. Indicate also
its relationship to the sounds of আ and ও.

5. Write notes on the Modern Bengali pronunciations of *eight* of the
following *tatsama* words, and comment on their *tadbhava* forms in
Old and Modern Bengali :—

কৃষ্ণ, লক্ষ্মী, স্মরণ, শ্মশান, স্বস্তি, জ্ঞান, শ্রাবণ, স্পর্শ, বৃদ্ধক, ভদ্র,

দ্বাদশ, সজ্জা ।

How have the following sound-groups of Indo-Aryan (Sanskrit) been
simplified in Modern Bengali : -*yā* (after a consonant), -*vā* (after a conso-
nant), *kṣ*-, *hy*- ?

6. Explain fully the following equations :—

Bengali দুই=Gujarati বে ; Bengali কোঁয=Marathi কুস ; Bengali গম
=Hindi গেঁহূঁ ; Bengali নাই=Gujarati নথী ; Old Bengali কৈল=Hindi
কিয়া.

Illustrate by similar examples (which should be not less than *six* in
number) that the close relationship between Bengali, Hindi and Marathi
can be established only by referring to the Prakrit forms.

7. Comment on the phonology of *eight* of the following words, and
trace them to their Indo-Aryan (Sanskrit) originals through the Old
Bengali and Magadhi Prakrit :—

হাল্কা, ঝিউড়ী, সাতাত্তর, দেথ, বাট, বদম, পড়ে (=reads), পড়ে
(=falls), বটে, পিসী, কামার, বোন্ ।

8. Writes notes on the sematology of *ten* of the following words :—

রাগ, পরিবার, কনে,' জলপান, সুতরাং, সংঘী, সম্পন্ন, সাহেব, কর্তা, এবং, গুরু, মন্ত্র, রহস্য, সমূহ, বিলক্ষণ ।

9. Explain *ten* of the following Old Bengali words :—

বুঝিত, থরা, পিন্দই, নিয়ড়ে, নজীব, আঁখুরিয়া, নেহ, নিছনি, জুয়ায়, রাতুল, বাউল, রাউত, অপরূপ, রা, বাও ।

10. Illustrate the working of the following principles in Bengali Semantics :—(i) narrowing, (ii) widening, (iii) shifting. Give at least *four* examples for each case from among *tadbhava, tatsama* or foreign words.

COMPARATIVE PHILOLOGY.

SEVENTH PAPER.

Examiner—SUNITIKUMAR CHATTERJI, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Select only SIX *questions.*

1. Discuss fully, with reference to Prakrit as well as Indo-Aryan (Sanskrit), the forms for the Bengali noun in the nominative singular and plural.

State your views as to the origin of the suffix দিগের.

2. Write a full historical note on the forms for the first personal pronoun in Bengali, and compare them with those of Oriya, Marathi, Gujarati, and Western Hindi.

3. Compare and contrast 'the past system of the Bengali verb with that of Prakrit 'and Classical Sanskrit. Discuss the origin of the past suffix -ল, and compare it with the corresponding forms in the other important Prakritic speeches.

4. Distinguish between -নী (আনী) and ঈ as feminine suffixes in Modern Bengali.

Comment on *four* of the following words with reference to their gender suffixes :—নিন্দা, জেঠাই, জামাই, রাণী, ননদিনী, ভাজ.

5. Write a 'note on the ordinal forms of the numerals in Bengali. Write etymological notes on *four* of the following words :—দেড়, পৌনে, দুনা, বোন, তেইশ, সাতাশ (as in সাতাশ ছেলে).

6. Discuss the origin of *six* of the following suffixes :—এ (as in শহরে), আ (as in হাতা), ইয়া (as in চলিয়া), ইতে (as in খাইতে), মি (as in ছেলেমি), উআ (as in জলুয়া), পনা (as in গণপনা), আর (as in চামার).

Comment on the suffixes of *four* of the following :—

খাঁসড়ী, রাজারাজড়া, দেউড়ী, ঝিয়ারী, বিলাতী, ডাকাইত ।

7. Write morphological notes on *eight* of the following words:—
করেন, নাচান (infinitive), খাওন, আগেকার, দেখিনু, ঘরহৈতে, পথদিয়া তাহারে (accusative), পূজিবারে, স্বকৃন৷, বসন্ত, রহতা ।

8. Discuss the character of the language of the following poem by Govindadāsa :—

যাহক লাগি, গুরুগঞ্জনে মন রঞ্জয়, তুরজন কিয়ে নাহি কেল ।
যাহক লাগি, কুলবতী বরত সমাপল, লাজে তিলাঞ্জলি দেল ॥
সজনি জানহ কঠিন কঠিন পরাণ ।
ব্রজপুর পরিহরি যাওব সো হরি শুনইতে নাহি বাহিরান ॥
যো মধু সরস সমাগম লাগস মণিময় মন্দির ছোড়ি ।
কণ্টক কুঞ্জে জাগি নিশি বাসর পন্থ নেহারত মোরি ॥
যাহক লাগি চলইতে চরণে পড়ল ফণী মণিমঞ্জীর করি মানি ।
গোবিন্দদাস ভণ ঠৈছন সো দিন বিছুরবা ইহ অনুমানি ॥

9. Comment syntactic*d*lly on *eight* of the following passages:—

   (i) হিরণ্যকশিপু মারি পিবন্তি রুধির ।

  (ii) শুনিয়া রাজাএ বোলে হইয়া কৌতুক ।

 (iii) রাজসভা পূজিত উঁহ গৌরব অপার ।

 (iv) তবুও প্রভুর নিন্দা সহন না যায় ।

  (v) না পুড়িও রাধা অঙ্গ না ভাসাইও জলে ।

 (vi) মুছিয়া ফেলিব আমি সীঁথির সিন্দুর ।

(vii) শিরে অবিকল জটার পটল বাঁধিল বেড়িয়া বেড়িয়া ।

(viii) পিছে পিছে চলে যত বাছুর চালাইয়া ।

 (ix) সর্ব্বদ্রব্য দিমু আমি তুমি খাইবার ।

  (x) নিশ্চিন্ত না থাকিও প্রমাদ হবে পাছে ।

10. Indicate the habits of Bengali with regard to *two* of the following, and give examples to illustrate your answer :—
    (i) the retention or omission of pronouns in a sentence,
    (ii) the position of the subject and the object,
    (iii) the uses of the auxiliary verbs আছ and থাক,
    (iv) the use of কর, to form causatives.

COMPARATIVE PHILOLOGY.

EIGHTH PAPER.

Examiner—PRAPHULLACHANDRA GHOSH, ESQ., M.A.

The figures in the margin indicate full marks.

Write an Essay on *one* of the following subjects:— 100
 (i) Linguistic Palaeontology.
 (ii) Comparative Mythology and the Science of Language.
 (iii) Application of the Roman Alphabet to the languages of India.
 (iv) European contribution to the Bengali vocabulary.

HISTORY.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal numerical value.

FIRST HALF.

Examiner—K. ZACHARIAH, ESQ., B.A.

Full marks—50.

N.B.—*Only* THREE *questions are to be attempted.*

1. Write a short essay on the Industrial Revolution in England in the latter half of the eighteenth century, dwelling mainly on its chief features, and its social, economic and political effects. Estimate the importance of the century in the development of English agriculture.

2. " If books are to be measured by the effects which they have produced on the fortunes of mankind *The Wealth of Nations* must rank among the greatest of books " Justify the above remark from the leading principles laid down by Adam Smith in his great work. To what extent did the two great political parties adopt a definite economic policy in the second half of the eighteenth century ?

3. Describe the character and position of the Whig aristocracy at the accession of George III. Account for the decay of aristocratic influence on English society and government in the reign of that monarch. Compare the English and the French nobility at the outbreak of the French Revolution.

4. Indicate the extent to which the habits and tastes as well as the literature of the English people, during the prescribed period, were influenced by (*a*) facility of communications, (*b*) the connection of England with India, and (*c*) the French Revolution.

5. Explain the nature of Burke's conservatism, with special reference to (*a*) his opposition to radical reform ; (*b*) his plea for a natural aristocracy in the state, and (*c*) his appeal to experience against dogmatism. On what questions did he exert himself in the cause of reform ?

SECOND HALF.

Examiner—BEPINBIHARY SEN, ESQ., M.A.

N.B.— *Only* THREE *questions are to be attempted.*

Full marks — 50.

1. "The influence which is derived from stainless integrity, the influence which is derived from the vilest arts of corruption, the strength of aristocratic connection, the strength of democratical enthusiasm, all these things were for the first time found together." Illustrate the truth of this remark by a reference to the character, the composition and the success of the ministry which was in power at the accession of George III.

2. Attempt an estimate of the character and work of George Washington in the struggle for American independence. Expand—"Washington and his fellows had in one sense to form a nation, in another sense to free a nation."

3. Describe the various measures of conciliation and coercion adopted by the British parliament,in dealing with the American colonies from the passing of the Stamp Act to the outbreak of the war of independence, and indicate the effects of these measures on the temper of the colonies.

4. Illustrate the influence of sea power in the contest between Great Britain and France by references to the chief naval engagements in the course of the struggle from 1793 to 1806.

5. Account for Napoleon's hatred of Great Britain, and show in what different ways it expressed itself down to the time of his assumption of the imperial title. What schemes did Napoleon entertain for the development of French interests outside Europe, and why did he fail to carry them into effect ?

HISTORY.

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

SIX *questions are to be answered,* THREE *from each half.*

FIRST HALF.

Examiner—RAMESCHANDRA MAJUMDAR, ESQ., M.A.

1. Comment upon the following:—
"According to the evidence of facts, and to the distinct avowal of Dowlut Rao Scindiah, and the Rajah of Berar, those chieftains had no cause of complaint against the British Government, nor any reason to apprehend that their just rights and interests were exposed to hazard by the arrangements concluded between the British Government and the Peishwa."

2. Criticise Wellesley's dealings with the Nabob Vizier of Oudh with special reference to the views of Mill, Owen and Sir Arthur Wellesley.

3. Examine, with reference to original documents, the grounds upon which the administration of the Carnatic was taken over by the British.

4. Give a comparative estimate of the political ideals of Cornwallis, Shore and Wellesley.

5. How far were the Anglo-Indian statesmen successful in coping with the administrative difficulties in Bengal in the closing decade of the eighteenth century ?

SECOND HALF.

Examiner—S. N. SEN, ESQ., M.A.

6. How far were Mahdajee Sindhia and Nana Farnavis successful in reversing the verdict of Panipat ?

7. Contrast Jasovanta Rao Holkar with Mahdajee Sindhia as regards character, aims and achievements.

8. Point out the defects in the internal organisation of the Mahratta Confederacy.

9. Give a general account of the Mahratta Policy towards (a) the Nizam and (b) the Sultan of Mysore, from the Siege of Nurgoond to the fall of Seringapatam.

10. Form an estimate of the administrative reforms of Tipu Sultan.

HISTORY.

THIRD PAPER.

Candidates are required to give their answers in their own words as far as practicable.

All questions are of equal value.

FIRST HALF.

Examiner—GAURANGANATH BANERJEE, ESQ., M.A.

Full marks—50.

N.B.—*Only* THREE *questions to be attempted.*

1. Trace the development of the Egyptian foreign policy from the beginning of the XIIth to the end of the XXth dynasty.

2. Who were the Hyksos ? "The Asiatic Conquest is the central climacteric of Egyptian history" (*Hall*). Expand.

3. "Everything in ancient Egypt bears the impress of religion" (*Leonarmant*). Elucidate.

4. Comment on the following: "Thutmoses III's reign marks an epoch not only in Egypt but in the whole east as we know it in his age." Say what you know about the "feud of the Thutmosids."

5. "The art of a country like the character of its inhabitants belongs to the nature of the land" (*Petrie*). Apply this dictum to Egyptian art.

SECOND HALF.

Examiner—PRAMATHANATH BANERJEE, ESQ., M.A.

Full marks—50.

N.B.—*Attempt any* THREE *and not more than three.*

6. Write a short essay on the age of Hammurabi and its influence on the later periods of Babylonian history.

7. "The Assyrian 'empire' with its lack of unity in population, with a government that ignored the reciprocal support of its individual parts, disappeared suddenly after the fall of Nineveh, making no attempt to recover and leaving not a trace behind, there is no ground for astonishment" (*Winckler*). Discuss. Analyse the political condition of Western Asia at the time of the destruction of Nineveh.

8. Write a connected account of the "Prophets" and estimate their influence on the history of the Hebrews.

Or,

Institute a comparison between Imperialism in ancient Egypt and Persia.

9. Give some account of the formation of new kingdoms which resulted from the breakup of Alexander's empire.

10. Indicate the historical significance of the part played in the ancient world by—

> (*a*) the Sumerians,
> (*b*) the Elamites,
> (*c*) the Lydians,
> (*d*) the Cimmerians and the Scythians.

HISTORY.

FOURTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

Not more than SIX *of these questions should be attempted,* THREE *from each half.*

Questions carry equal marks.

FIRST HALF.

Examiner—J. N. DASGUPTA, ESQ., B.A. (*Oxon*).

Any THREE *questions.*

1. Comment on the following from the point of view of the constitutional historian :—

(*a*) "It is no shame among the Germans to be seen among the companions of a chief! When they come to battle it is shameful for the chief to be surpassed in valour; it is shameful for his companions not to equal the valour of their chief."

(*b*) "The lands are occupied by townships, in allotments, proportional to the number of cultivators, and are afterwards parcelled out

among the individuals of the district in shares according to the rank and conditions of each person."

2. To what extent did William I arrest feudalism as a form of government ?

3. Write a critical appreciation of the statesmanship of Henry I as seen in his dealings with (a) the baronage, (b) the church, and (c) the people.

4. Give the main features of the judicial policy of Henry II, and show how by that means he broke materially the power of the barons.

5. Trace the career of Simon de Montfort. What part did he play in the development of parliamentary institutions ?

6. What is meant by the Lancastrian experiment ? What were the main constitutional developments of the period, and to what extent were they defeated by the break-down of law and order ?

SECOND HALF.

Examiner—G. ANDERSON, ESQ., M.A.

Any THREE *questions.*

7. What were the chief causes of the strength of the Tudors ? How far is it true to say that parliamentary institutions were developed during their time ?

8. Discuss the methods of Charles I in raising money, and show how they contributed to his downfall.

9. Do you agree with the statement that Oliver Cromwell failed as a constructive statesman ?

10. Examine the chief causes of the failure of James II, and in particular his ecclesiastical policy.

11. Show how the power of the Crown was increased during the reign of Queen Victoria.

12. Discuss the position of the cabinet during the reign of King Edward VII. What big departures were made by Mr. Lloyd George in the formation of his present cabinet ?

HISTORY.

FIFTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Only SIX *questions to be attempted* (THREE *from each half*), *including question* 12.

FIRST HALF.

Examiner—H. C. RAY CHAUDHURY, ESQ., M.A.

1. " Nevertheless it must be admitted that in the case of intervention as in that of revolution, its essence is illegality and its justification is its success." Explain and comment. Mention the circum-   16

stances in which a State is justified in intervening, illustrating your answer from historical examples.

2. Describe the international status of any *four* of the follow- 16 ing:—Egypt, Cyprus, the Suez Canal, the Dardanelles, Cuba, the Ionian islands, the Zuyder Zee.

3. Explain the present tendency of the law relating to the navi- 16 gation of International rivers by reference to the international status of the Rhine, the Danube, the St. Lawrence, the Niger, and the Amazon.

4. Write short notes on any *four* of the following:—the Monroe 16 doctrine, Colonial protectorate, jus postliminii, the laws of the Rhodians; Mare Clausum; recognition of insurgency; Consular courts; sphere of influence.

5. Explain the nature and extent of a State's jurisdiction over 16 foreign vessels, public and private, within its waters, by reference to the English, French and American laws upon the subject.

6. State the nature of the immunity from Civil and Criminal juris- 16 diction enjoyed by a foreign Ambassador in England as regards his person, his *suite*, and his property.

SECOND HALF.

Examiner—A. C. DATTA, ESQ., M.A.

7. " In addition to the prohibitions provided by Special Conven- 16 tions, it is particularly forbidden to declare extinguished, suspended, or unenforceble in law, the right of the subjects of the hostile party to institute legal proceedings." Explain and comment. What are the legal effects of the outbreak of war upon the commercial inter-course between hostile states ?

8. What do you understand by the right of Angary ? Discuss the 16 legality of its exercise by the Allies in the present war.

9. During the present war—   16
  (a) A cargo of non contraband goods belonging to a German sub-ject domiciled in Spain was seized by the British on a German vessel proceeding to Spain.
  (b) A cargo of wheat, being the produce of an estate in Brussels, owned by *X* a Spanish subject domiciled in Spain, was seized by the British on a German vessel while on its way to Cadiz. The cargo in question was the property of *X*.
  Discuss the legality of the seizures in the cases mentioned above, and explain the law applicable in each case.

10. During the present war—   16
  (a) A Spanish vessel carrying absolute and conditional contra-band from South America to Cadiz was captured by the Germans. The goods in question were to be landed at Cadiz and transported by land to a private firm in Paris. The goods were condemned.
  (b) A Spanish vessel carrying absolute and conditional contra-band from South America to Stockholm was captured by the Germans in Mid-Atlantic. The vessel was to touch at Portsmouth on her way to Stockholm for which the goods in question were documented. The goods were condemned.

(c) A Spanish vessel, while on a voyage specially undertaken to transport individual passengers embodied in the armed forces of the Allies, was captured by the Germans. The vessel was condemned.

Discuss the legality of the decisions in the cases mentioned above, clearly stating the law governing each case, and explain the circumstances that would justify the condemnation of neutral vessels for carrying contraband.

11. Write a short statement of the law relating to any two of the 16 following :—

(a) The military authority exercisable by a belligerent State over hostile territory in its possession.

(b) Bombardments by naval and land forces in time of war.

(c) The status of enemy merchant ships at the outbreak of hostilities.

(d) The destruction of prizes at sea.

12. Write a short account of any *five* of the following, clearly 20 explaining the law involved in the decision of each case :—

Mighell v. The Sultan of Johore ; In re Castioni ; the " Exchange " v. McFaddon ; the " Huascar " ; the " Hoop " ; the Peterburg and the Smolensk ; the " Twee Gebroeder " ; the " Franciska " ; the " Peterhoff " ; the " Atalanta. "

HISTORY.

Special Period of Indian History.

First Paper.

Candidates are required to give their answers in their own words as far as practicable.

All questions carry equal marks.

THREE *questions are to be attempted from each half.*

First Half.

Examiner—SURENDRANATH MAJUMDAR, ESQ., M.A.

1. Describe in some detail the life of the Vedic Aryans, dwelling mainly on their towns, villages, houses, occupation, food, and dress.

2. State briefly the contents of (a) the *Atharvaveda Saṁhitā* and (b) the *Srautasūtras* or the *Dharmasūtras*.

3. (a) What, according to Bhiṣma, are the characteristics of *gaṇas*, and what is the policy to be adopted by powerful kings towards them ?

(b) Explain clearly the safeguards prescribed by Bhiṣma to protect the people from the oppressions of a king and his officers.

4. State the various sources of revenue in ancient India, in ordinary times and in times of distress.

5. (a) Discuss the age of the *Manusaṁhitā* and account for its title.

(b) Describe fully the procedure of conducting law suits, as given in the *Manusaṁhitā*.

SECOND HALF.

Examiner—RAMESCHANDRA MAJUMDAR, ESQ., M.A.

6. What general information do you derive from a study of the in-scriptions, regarding the political and religious condition of India during the fourth and fifth centuries A.D. ?

7. Explain fully how the inscriptions discovered at Mandasor and Bhítari have advanced our knowledge about the history of ancient India.

8. Give a critical account of the economic condition of India at the time of the rise of Buddhism.

9. To what extent can you accept the traditional account of the first two Buddhist Councils as historical ?

10. Give a short account of the Buddhist literature, with special reference to the Jātaka stories,—the probable age of their composition and their importance as a source of Indian history.

HISTORY.

SPECIAL PERIOD OF INDIAN HISTORY.

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Only THREE *questions to be attempted from each half.*

FIRST HALF.

Examiner—DR. D. R. BHANDARKAR, M.A., PH.D.

Full marks—50.

1. What do you know about the Aryan colonisation of Southern India and Ceylon ?

2. Describe the social, economic and religious condition of the Deccan during the Sātavāhana period.

3. Give brief accounts of the following :—
   (a) The struggle of the Sātavāhanas with the Kshatrapa dynasties for political supremacy.
   (b) Principal events in the reign of Pulakeśi II of the early Chalukya Dynasty.

4. (a) What qualities constituted *dhamma* according to Asoka ?
   (b) How were they to be exhibited in practice ?
   (c) What means did he adopt for fostering the growth of *dhamma* among his subjects ?

5. (a) What was the extent of Asoka's dominions ? Illustrate your answer by a sketch-map.
   (b) Enumerate the feudatory chieftains and independent kings mentioned in Asoka's inscriptions. In what connection does he refer to them ?

SECOND HALF.

Full marks—50.

Examiner—BABU GAURANGANATH BANERJI, M.A.

1. Prove by reference to the art, literature and state-organisation of the time that India in the 3rd century B.C. may be justly regarded as a highly civilised state.

2. What do you know about Harshavardhana from Yuan Chwang's account ? How far is it corroborated from Indian sources ?

3. Write topographical and historical notes on any *six* of the following :—

    (*a*) The Mallai and Oxydrakoi.
    (*b*) Patala.
    (*c*) Pushkalāvati.
    (*d*) Chryse.
    (*e*) Palaesimundu.
    (*f*) Bacarê.
    (*g*) Ka-chu-wen-kilo.
    (*h*) Aspasioi Assakenoi.

4. Institute a brief comparison between the political and religious condition of Northern India in the 4th century A.D. and the first half of the 7th century A.D.

5. (*a*) Account for the origin of the name "The Periplus of the Erythræan Sea," and discuss the date of its composition, as determined by various commentators.

    (*b*) Indicate the extent of Hellenic influence on India.

HISTORY.

ECONOMIC HISTORY OF ENGLAND AND INDIA.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

FIRST HALF.

Full marks—50.

Answer any THREE.

1. Write a short essay on the breakdown of the manorial system in England.

2. Describe the organisation and aims of the craft guilds and the relations that existed between them and (i) the merchant guilds, (ii) the municipal authorities.

3. · "In the economic history of England the policy of Burleigh constitutes a great watershed, dividing the old from the new." Explain and
illustrate.

4. Discuss immigration as a factor in English economic development.

5. "History seems to be proving that no great institution has been
without its use for a time, and its relative justification." Comment on
this statement with reference to the economic history of England.

SECOND HALF.

Full marks—50.

Answer any THREE.

1. Explain the causes of English colonization in the 17th century.

2. Suggest comparisons between England's agricultural history during
the latter half of the 18th century and her industrial history during the
same period.

3. Compare the financial expedients contrived by Pitt during the
Revolutionary and Napoleonic wars with those used in the present war.

4. What circumstances led to the enactment of Combination Laws in
England, and what led to their repeal ?

5. Discuss the position of the various political parties and social classes
on the question of Corn Law Repeal.

HISTORY.

ECONOMIC HISTORY OF ENGLAND AND INDIA.

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

Attempt only THREE *out of the following* FIVE *questions.*

FIRST HALF.

1. Give a short historical account either of the *Jute* or the *Tea* industry in India during the last three-quarters of a century.

2. Write historical notes on the *Salt* and *Opium* revenue, referring to
the principal administrative changes in the methods of their production,
distribution and consumption.

3. Trace the development of the *Famine policy* of the Government of
India from 1863.

4. Give a critical and historical description of the *land cess* in India.

5. Discuss the relative importance of railways and canals—
    (1) in connection with the prevention and relief of famines;
    (2) in the development of agriculture and industries.
What part have the Indian waterways played in the past in the
development of internal trade, and what are the possibilities for such
development in the future ?

SECOND HALF.

1. (a) What do you know of Akbar's revenue system ?
   (b) Trace the history of the administration of land revenue in Bengal from 1765 to 1793.
2. Describe the progress of factory legislation in India.
3. Outline the history of the Indian Paper Currency system.
4. (a) Account for the chief peculiarities of the foreign trade of India.
   (b) What are the main factors affecting India's foreign trade between 1860 and 1900 ?
5. Discuss briefly the effects of the present war on Indian trade and industries.

HISTORY.

COMPARATIVE POLITICS.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal numerical value.

FIRST HALF.

Examiner—J. N. DAS GUPTA, ESQ., B.A. (*Oxon*).

Full marks—50.

Only THREE *questions are to be attempted.*

1. "Religion and not laws first guaranteed the right of property." Fully expand the idea, and trace the growth of the principle of succession to property in Roman and Hindu law. Discuss the reasons for the origin and growth of the right of primogeniture in Mediaeval Europe.
2. Distinguish an ancient from a modern State, and discuss the relation of the citizen to the State in an ancient and a modern commonwealth.
3. Show that Roman kingship was but an extension of Roman *Patria Potestas*. Briefly indicate the steps which led to the admission of the unprivileged class among citizens in ancient Rome and in Greek cities like Athens.
4. Sketch the growth of the Athenian democracy, and point out its leading characteristics. What differences do you notice between an ancient and a modern democracy ?
5. Compare the code of Draco with that of Solon. In what respect do you find a resemblance between the position of the Board of Decemvirs and that of Solon ? What new principles of government were introduced in Rome and Athens after the codification of their laws ? Estimate the work of Solon as a legislator.

Second Half.

Examiner— Bepinbihari Sen, Esq., M.A.

Only THREE *questions are to be attempted.*

1. What, according to Plato and Aristotle, are the conditions of an ideal State? To what extent was the principle of the rule of the best realised in the republic of Rome and in Sparta?

2. Distinguish *Tyranny* from *Monarchy*. Account for the rise of the *Tyrants* in ancient Greece, and state the reasons which led them to develop imperial instincts. Show that the rule of the *Tyrants* was but a stage in the political evolution of many of the Greek states.

3. Distinguish the Athenian from the modern conception of democracy. What were the weak points in the democratic constitution of Athens? Indicate the causes which prevented the Roman political organization from taking a democratic character like that of Athens.

4. Compare the system of checks in the Roman republican institutions with that which is in operation in any one modern State. Do you notice any resemblance between the growth of Roman constitutional history and that of England in the Middle Ages?

5. "Democracy is strongest in legislation while it is comparatively weak in deliberative and executive departments." Examine the justice of the remark, and show how the inherent defects of democracy were avoided in the republican constitution of Rome.

HISTORY.

Comparative Politics.

Second Paper.

Examiner—Pramathanath Banerjee, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Candidates are permitted to answer SIX *and not more than six questions,* THREE *to be taken from Group A and* THREE *from Group B.*

All questions are of equal value.

Group A.

1. 'Rousseau's whole system is "inverted Hobbism."' Discuss.

2. Discuss, in view of actual facts, Montesquieu's theory that the executive power should be independent of the Legislature.

3. "The two historical watchwords of Democracy exclude one another, and where there is political liberty there can be no equality" (*Maine*). Support or refute this statement.

4. (*a*) "The weak point of the American Constitution lies in the Senate."

(b) "The Senate of U.S.A.—the masterpiece of Constitution makers." How do you account for this diversity of opinion ?

5. What are the true faults of the American democracy, and how does public opinion rule in America ?

6. "The Swiss confederation is on the whole the most successful democracy in this world" (*Lowell*). Do you agree with this view ?

GROUP B.

THREE, *and not more than three, questions to be attempted.*

7. Discuss the question whether "public opinion" finds a more adequate expression in the English system of parliamentary government or by the devices of the "Initiative," "Referendum," and "Recall."

8. "The Imperial Chancellor in Germany bears a close resemblance to the Prime Minister in England." Do you agree ? Why should not the transfer of power from the Emperor to the Reichstag not produce a democracy in Germany ?

9. What is the exact position of the House of Lords among the Second Chambers of the world ? Is an upper chamber in a federal form of government an absolute necessity ?

10. In what senses is it true to say that the recent history of Austro-Hungary has been a bundle of contradictions ?

11. Feudalism is the negation of all that we hold to be the most important in the conception of the state and citizenship." Discuss.

12. Give a short sketch of the Indian constitution. Do you think the various states or provinces of India can be federated under a responsible form of government in the near future ?

HISTORY.

SPECIAL PERIOD OF EUROPEAN HISTORY—THE REFORMATION.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

All questions are of equal value.

FIRST HALF.

Examiner—D. OWSTON-SMITH, ESQ., M.A.

Full marks—50.

Attempt THREE *questions.*

1. "The position of the new Pope (Adrian VI in 1522) was beset by difficulties on every side." Explain the nature of the difficulties and the way in which the Pope faced them.

2. Give a sketch of the movements in favour of reform in Italy, distinguishing those which were hostile to the Papacy from those which endeavoured to preserve the unity of the Church.

3. Give an account of the policy, ideals and career of Paul IV. (*Caraffa*)

45

4. Describe the ecclesiastical state of Sweden about 1525 and explain the attitude and policy of Gustavus Vasa towards the Reformation movement.

5. Describe the objects of the following at the Council of Trent in 1562:—Ferdinand, Philip, the Cardinal of Lorraine, the Spanish bishops. Explain the methods used by the Papal party to gain their ends. Estimate the final result of the Council,

SECOND HALF.

Examiner—K. ZACHARIAH, ESQ., M.A.

Answer Question 6 *and* ANY TWO *of the rest.*

1. " Erasmus showed us the promised land " (*Luther*), " The Reformation killed letters " (*Erasmus*).

Discuss these two statements.

2. " In politics as well as in theology, Luther was really conservative." How far is this true ?

3. Was there any consistent principle underlying Charles V's treatment of the Lutherans between 1521 and 1546 ?

4. Give some account of the part played by the towns in the history of the German Reformation. Explain why they did not take a more prominent share.

5. Sketch the career and point out the importance of *either* Philip of Hesse *or* Maurice of Saxony.

6. Comment on—

(a) " Every Christian who feels true compunction has of right plenary remission of punishment and guilt without letters of indulgence." (*Luther's Theses*).

(b) " We, the Electors, Princes, Estates of the Empire....have unanimously agreed....that till the meeting of the Council or a national Assembly....each one should so live....as he hopes and trusts to answer it to God and His Imperial Majesty " (*Recess of the Diet of Spires*, 1526).

(c) " The six cities earnestly pray the Five Cantons to have nothing to do with....pensions, subsidies and gifts (*The First Peace of Kappel*, 1529).

(d) " We....constitute and depute you, Giovanni Pietro (Caraffa and others)....in the cities, towns, lands and places of all and singular Christian states, north and south of the Alps....to act as Inquisitors General (*Bull Licet ab initio*, 1542).

HISTORY.

Special Period of European History—the Reformation.

Second Paper.

Examiner—Aswinikumar Mukherjee, Esq., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions are of equal value.

Only THREE *questions from each half are to be attempted.*

First Half.

1. " There was a good deal of *heresy*, so called, in England, long before
Luther's voice had been heard in Germany."
Give some account of this heresy so as to bring out those influences which
predisposed England to the Reformation.
2. " The Reformation in England was divergent in origin, method and
aim from all the phases of the movement abroad." Discuss.
3. Compare and contrast Gardiner and Cranmer.
4. Review Anglo-Scottish relations in the Tudor period. How were
they affected by the Reformation ?
5. " The Elizabethan settlement in Church and State was a compromise
satisfactory to no party, and very unsatisfactory indeed to the constitu-
tional lawyer or historian ; but, possibly, the best arrangement compatible
with circumstances." Explain.

Second Half.

1. Estimate the position and prospects of the Protestants in Europe in
the summer of 1572. How far was the Massacre of St. Bartholomew
premeditated ? What were its main results ?
2. Examine the political system of Calvin. What was the Swiss view
of religious persecution ? Whence comes the idea of Toleration in Europe ?
3. Shew how the Reformation in Scotland differed from that in Eng-
land, and account for that difference. Explain the system of Church
government adopted in Scotland.
4. William the Silent is regarded as the founder of the Dutch Republic.
To what extent is this the case ? Trace his career from the Execution of
Egmont and Hoorn to the Death of Don John of Austria.
5. What are the main differences in belief between a Roman Catholic
and a Protestant ? Explain the position and powers of a Cardinal, of a
Bishop, of a Priest. What is a General Council ? What is Convocation ?

HISTORY.

HISTORY OF ISLAM.

FIRST PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Examiner—S. KHUDA BUKSH, ESQ., M.A., B.C.L.

The figures in the margin indicate full marks.

1. What light does the Ancient Arabian Poetry throw on the   10
history of the Arabs ?
2. Discuss Mohamed as a statesman.   20

Or,

Discuss the policy of Omar II. To what extent did it contribute
to the fall of the Omayyad dynasty ?
3. Write short notes on—(*a*) Hajjaj, (*b*) Saffah, (*c*) the family of   20
the Barmacides.

Or,

Describe the position of the Jews and the Christians under the
Caliphate.

SECOND HALF.

Examiner—ASWINIKUMAR MUKHERJEE, ESQ., M.A.

Only THREE *questions to be attempted.*

The questions are of equal numerical value.

Full marks—50.

1. Describe the part played by Egypt in the history of the Cru-
sades.
2. Write a note on the Circassian Mamlūks ; their social system,
government, the internal condition, and the international position
of Egypt under their rule.
3. Describe the life and times of Omar ibn Hafsūn. Account for
his failure.
4. Write a note on the Almohades ; their origin, rule in Spain
and fall.
5. Write a note on the agriculture, commerce and industry of the
Spanish Moslems.

HISTORY.

HISTORY OF ISLAM.

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Examiner—L. F. RUSHBROOK WILLIAMS, ESQ., B.A., B.LITT.

Only THREE *questions from this half should be answered.*

The questions are of equal value.

Full marks—50.

1. Estimate the relative force of (*a*) Religion, (*b*) Fear of Insurrec- 16
tion, as constitutional restrictions upon the power of the Monarchy
of Delhi during the thirteenth and fourteenth centuries.

2. In what respects did Northern India profit by the rule of the 16
Slave Kings ?

3. "Throughout the entire fourteenth century, the politics of the 16
North-West Frontier continued of vital importance in the history of
the Delhi Sultanate." Criticise.

4. Is it true to say that between 1200 and 1526 "India was more 16
a part of Central Asia" than at any other period of her history ?

5. Account for the failure of Southern India to evolve a counter- 16
part to the Mughal Empire.

6. Give some account of the principal authorities for the study of 18
this period, with critical notes as to their relative value.

SECOND HALF.

Examiner—JADUNATH SARKAR, ESQ., M.A.

Only THREE *questions from this half should be answered.*

All the questions are of equal value.

1. Write a study of Akbar as a social and religious reformer,
noticing the extent and duration of his innovations and prohibitions,
and the non-Islamic influences that played upon him.

2. Examine the position and influence of the Muslim Church in
relation to the State at different periods of the Mughal domination
of India.

3. The sources of revenue of the Mughal empire,—the reforms in
the system of assessment and collection under different Emperors,—
and the general condition of the peasantry as affected by the actual
revenue administration.

4. Trace the history of the relations of the Mughal empire with
Afghanistan, Persia and Central Asia from 1530 to 1765.

5. It has been held by some that if the liberal and tolerant Dara Shukoh had succeeded Shah Jahan, the decline of the Mughal empire might have been delayed.
Discuss the correctness of this view.

6. Write the history of the Mughal expansion in the Deccan in the 17th century, and criticise its effect on the empire.

HISTORY.

ESSAY.

EIGHTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Indicate on the cove∙ of the answer-book the subject of your Essay by the use of the appropriate letter, A, B, C, D, E, F, G, H, I, J.

Write an essay on only *one* of the following subjects :—   100

A.

Examiner—BEPINBIHARI SEN, ESQ., M.A.

Liberalism and Nationalism—the twin daughters of the French Revolution.

B.

Examiner—H. C. RAI CHAUDHURY, ESQ., M.A.

Wellesley and British Imperialism.

C.

Examiner—GAURANGANATH BANERJEE, ESQ., M.A.

The legacy of Babylon to the Civilization of the world.

D.

Examiner—L. F. R. WILLIAMS, ESQ., B.A., B.LITT.

The growth of nationalism in English Constitutional History.

E.

Examiner—PRAMATHANATH BANERJEE, ESQ., M.A.

Aeroplanes and submarines in International Law.

F.

Examiner—HON. DR. A. SUHRAWARDY, M.A., PH.D.

Influence of Islam on Hindu thought and culture.

G.

Examiner—DR. D. R. BHANDARKAR, M.A.

Public Administration in Ancient India.

H.

Examiner—S. C. RAY, ESQ., M.A.

The Co-operative movement in India: its past, present and future.

I.

Examiner—G. ANDERSON, ESQ., M.A.

Ideals of world empire: ancient and modern.

J.

Examiner—K. ZACHARIAH, ESQ., B.A.

Calvinism.

PHILOSOPHY.

FIRST PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Examiner—DR. G. T. ROSS, M.A., D.PHIL.

THREE *questions only in this half to be answered.*

The questions carry equal marks.

1. What is the significance of the teaching of Heraclitus ? . Trace its chief effects upon subsequent philosophic theories.
2. Give an appreciation of the contribution of Pythagoras and the early Pythagoreans to philosophic and scientific thought.
3. State and explain the paradoxes of Zeno and point out their relation to the theories which they were meant to refute.
4. Explain the rise of Stoicism and account for the success which it had in the ancient Greek and Roman world as a doctrine of practical ethics.
5. Discuss the relations between Platonic doctrines and Neo-Platonism.

SECOND HALF.

Examiner—J. R. BANERJEE, ESQ., M.A.

Full marks—49.

Candidates are required to attempt only THREE *questions, of which
the* FIFTH *must be one and only one.*

The figures in the margin indicate full marks.

1. What were the influences exerted on Socrates' philosophical development ? In what does his peculiar philosophical significance lie? Explain and examine the Socratic doctrine that virtue is knowledge.　15

Or,

Mention the schools to which the designation " the partial disciples of Socrates " has been given. What does this designation really　15

imply ?   State the doctrines of *any two* of these schools and examine them.

2.   What, according to Plato, is the relation of God to the Ideas ?   1.
Fully discuss this question.   What is his doctrine of the World-soul ?

Or,

Fully discuss the Platonic doctrine of Matter, compare it with the   1.
Aristotelian doctrine of the same, and examine both the doctrines.

3.   State concisely what you know of (*a*) Aristotle's view of the   1.
orders or grades of human knowledge, (*b*) his doctrines of Nature
and Soul, and (*c*) his classification of virtues ?

Or,

" Aristotle considered himself a member of the school of Plato, and   15
sharply as he contested the doctrine of its founder in many points,
more especially in the central point of the doctrine of ideas, yet his
whole philosophy is far more deeply and completely defined by its
connection with Plato than by its opposition to him."   Fully develop
the ideas embodied in this sentence.

4.   State (*a*) the Platonic theory of the parts of the soul, and (*b*)   15
Plato's arguments for the immortality of the soul.   Criticise the latter.

Or,

(*a*) What exactly does Aristotle hold with regard to Chance and   15
Necessity ?   (*b*) " Aristotle's theism, important as it may have been
for the history of theology, has meant little or nothing for the reli-
gious life of mankind."   Examine this.

5.   Sketch, after Plato in the *Republic*, the ideal State or Constitu-   19
tion, noticing the manner in which he works out the analogy between
the soul of man and the constitution of a civil community.   Trace,
after him in the *Republic*, the origin and describe, as he does in this
work, the character of the four inferior men and States.   Is the Con-
stitution portrayed by him really the best ?   Discuss the question.

Or,

What does Aristotle say in *Metaphysics* about Unity and Plurality ?
Examine his views.

PHILOSOPHY.

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—KALIDHAN CHATTERJEE, ESQ., M.A.

Answer any. THREE *questions.*

1.   Give a critical account of the philosophical system of John   17
Duns Scotus.   Can Scotus be described as " the Kant of Scholastic
philosophy"?   Do you find any analogy between his theory of free-
will and that of any modern thinker ?

2.   Discuss the view that " the schoolmen were the defenders of   17
the rights of reason."   Indicate briefly the general characteristics of

mediæval philosophy, and compare them with those of ancient and of modern philosophy.

3. Expound Spinoza's Theory of Knowledge, and consider its consistency with the rest of his thought. Compare and examine briefly the conceptions of Cause in Spinoza and Descartes.

4. Compare Leibnitz's *monads* with (i) Spinoza's *finite modes*, and 17 (ii) Herbart's *reals*. Discuss Leibnitz's theory of the relation of soul and body, and compare it with those of Geulinex and Lotze.

5. "Berkeley is simply an incomplete Hume, and Hume simply 17 a Berkeley who has learned the implications of his own philosophy." Elucidate fully this statement. In this connection discuss the place of Berkeley in the history of modern philosophy.

Second Half.

Examiner—Dr. Hiralal Haldar, M.A., Ph.D.

Full marks—49.

Answer Question 5 and any two *of the rest.*

1. Explain the relation of the three Critiques of Kant to each 15 other.

2. How does Kant show that the principles of substance, causality 15 and reciprocity underlie experience ?

3. Explain fully Kant's conception of the ' Thing-in-itself.' 15

4. Explain and examine Kant's view of the Teleological Judgment. 15

5. Give an exposition of the main features of Hegel's Philosophy 19 with special reference to the questions at issue between Idealism and Realism, Monism and Pluralism. What objections have been 'urged against Hegelianism in recent times ? Examine the validity of these objections.

PHILOSOPHY.

Third Paper.

Candidates are required to give their answers in their own words as far as practicable.

First Half.

Examiner—Dr. Adityanath Mukherjee, M.A., Ph.D.

Only three *questions to be attempted.*

The questions are of equal value.

Full marks—5.

N.B.—*The . candidate is expected to illustrate his answers by giving, where possible, analogues and parallels from European Philosophy.*

1. " At this point the Buddhists remark : As for what you (Chārvākas) laid down as to the difficulty of ascertaining invariable concomitance, your position is unacceptable, inasmuch as invariable concomitance is easily cognizable by means of identity and causality."

Briefly explain the Chārvāka position, and formulate the arguments by which the Bauddha seeks to controvert it.

2. "Destroyed as it is by the malign influence of these and the like objections, the universal is unauthenticated."

Formulate the objections urged by the Bauddha against the doctrine of Universals.

How does the Jaina seek to overthrow the Bauddha doctrine of the Momentariness of everything ?

3. Sketch the Nyāya doctrine of Liberation, giving the Naiyāyika's review of doctrines of Liberation not accepted by him.

Or,

How does the Naiyāyika develop his theistic proof ? What objections are urged against it by the Sānkhya ?

4. Write an essay on the Unreality of the Universe from the standpoint of Māyā.

5. Explain any *two* of the following :—

(a) The four kinds of Perfection expounded in the Yoga system : the Madhumatí, the Madhupratíka, the Vísoka, and the Samskāraseshatā (Asamprajñāta).

(b) The Vedānta doctrine of the four states and the five sheaths of the Soul.

(c) The five Fallacies as recognized by the Nyāya system.

(d) The philosophical import of the three Gunas as expounded by the Sānkhya system.

SECOND HALF.

Examiner—SUSHILKUMAR MAITRA, ESQ., M.A.

Only THREE *questions are to be attempted.*

Full marks—50.

N.B.—*The candidate is expected to illustrate his answers by giving, where possible, analogues and parallels from European Philosophy.*

1. Discuss in the light of comparative philosophy Shankara's conception of Brahman (the Absolute) both as Nirguna (non-qualified) and as Saguna (qualified).

How does Rámánuja criticise Shankara's position with regard to the doctrine of Máyá (Cosmic Illusion) ?

2. Explain the relation of Jiva (the Individual Soul) to Brahman (the Absolute) as conceived (i) by Shankara, (ii) by Ramanuja.

What is the value of karma in a scheme of spiritual discipline (a) according to Shankara, (b) according to Ramanuja ?

3. Discuss the main points at issue between the following two doctrines of causality :—

(a) The effect is the heterisation (Vivarta) of the cause.

(b) The effect is the transformation (Parināma) of the cause.

The world is the transformation (Parināma) of Máyá and is the heterisation (Vivarta) of Brahman : explain this.

4. Examine the following :—

(a) Brahman is the material cause (upádána) of the world.

(b) Pradhána (*Natura*) is the material cause of the world.

(c) Paramánu (Atom) is the material cause of the world.

Or,

Give the substance of Shankara's criticism of the Buddhistic doctrine of Universal Impermanence.

5. Expound Shankara's dialectic in his refutation of the Vaisheshika categories of Dravya (Substance), Guṇa (Quality), and Samaváya (Intimate Relation).

PHILOSOPHY.

PHILOSOPHY OF RELIGION.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

SIX *questions to be answered, of which three must be from the first half and three from the second.*

The questions are of equal value.

FIRST HALF.

Examiner—REV. G. EWAN, M.A.

1. "The heart has reasons of its own which the Reason cannot comprehend." Consider with relation to the grounds of religious certainty whether this proposition is true.

2. What do you regard as the legitimate meaning of Divine Providence ?

3. With reference to Pantheistic arguments to the contrary, consider whether God may in any sense be regarded as transcendent.

4. Examine the compatibility of a doctrine of Divine Foreknowledge of human actions with the freedom and responsibility of the human will.

5. To what extent can an analysis of the nature of causation be regarded as leading to a Theistic view of God ?

SECOND HALF.

Examiner—DR. W. S. URQUART, M.A.

(*To be answered in a separate book.*)

6. Illustrate, by reference to Plato and Aristotle, the *intellectualism* of Greek Theology and Religion.

7. Shew the historical relation between Dualism and Mysticism and give a short account of the mystical tendency in Plotinus. •

8. Discuss, with reference to Stoicism, Bradley's statement that, "The world is the best of all possible worlds and everything in it is a necessary evil."

9. Assuming that there is no fundamental antagonism between the ideals of science and religion, show the service that can be rendered (*a*) by science to religion, (*b*) by religion to science.

10. Discuss the question whether the philosophical world-view which most commends itself to you can be regarded as a support of optimism or of pessimism.

PHILOSOPHY.

PHILOSOPHY OF RELIGION.

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions are all of equal value.

FIRST HALF.

Examiner—DR. B. C. GHOSH, M.A., M.B.

Full marks—50.

Try any THREE.

1.   Describe Hegel's conception of the Philosophy of Religion, noting specially its relation to philosophy in general and to positive religion.
2.   Sketch briefly Hegel's account of the *forms* of Religious Consciousness.
3.   Discuss Royce's definition of God as an Absolute Experience and follow up to the argument for His reality.
4.   Examine Royce's conception of the Will and its relation to the Absolute.
5.   Discuss, after Royce, the genesis of the Empirical Ego and its relation to the Self-conscious Absolute.

SECOND HALF.

Examiner—SATISCHANDRA CHATTERJEE, ESQ., M.A.

Full marks—50.

Try any THREE.

6.   Discuss briefly the relative validity of Mechanism and Finality and show how Janet reconciles them.
7.   State and examine fully the Lamarckian doctrine of Transformism as applied to the evolution of the organic world.
8.   How does Janet characterise Hegel's view as to the first cause of finality ?
   How far do you consider it to be a valid characterisation of the Hegelian position ?
   State and estimate the value of the arguments by which Janet claims to prove that the Hegelian view is unsatisfactory.
9.   State Spencer's doctrine of the Relativity of Knowledge and discuss what according to him is the basis of agreement between Science and Religion.
10.   Shew the relation between Mansel and Hamilton in respect of their agnosticism.
   Criticise the validity of Mansel's Agnosticism.

PHILOSOPHY.

ETHICS.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal numerical value.

FIRST HALF.

Examiner—KHAGENDRANATH MITRA, ESQ., M.A.

1. Explain and criticise Spencer's theory of Right Conduct. What explanation does Spencer offer of the need for the subordination of personal to social welfare ?

2. Explain the origin of Custom. Examine Wundt's law of the three stages in the development of moral conceptions. What is heterogony of ends ?

Or,

What is a moral norm ? Is a conflict of moral norms possible ? How is such a conflict resolved ? Distinguish Subjective and Objective norms with their corresponding duties and virtues.

3. Why does Kant bring in the conception of law in determining the moral standard ? How does he apply the conception to the problem of free-will ? Explain his conceptions of autonomy and heteronomy of the will.

SECOND HALF.

Examiner—DR. RAMDAS KHAN, M.A., PH.D.

4. Discuss in detail the relation of Sociology to the other Social Sciences.

5. What do you consider to be the physical basis of Society ? How does the contour of the earth's surface determine Social group ?

Or,

What do you understand by the differentiation of activities and of groups in Social evolution ? How do the social and intellectual conditions influence " association " ?

6. Discuss the different causes or forms of Social activity and the different Social aggregates arising in each form.

Or,

Explain briefly the economic, social, political, and psychical modes of Social activity.

PHILOSOPHY.

ETHICS.

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Examiner—J. LANGLEY, ESQ., M.A.

Answer any THREE *of the following questions which are of equal value.*

1. Compare the views expounded in the ethical writings of Kant and Green concerning the relation between desire and reason.

2. If the virtuous life were accompanied by extreme pain, would it be good for the agent ?

3. According to Martineau the objects on which our moral judgment is passed are ' *persons* exclusively and not *things*.' Explicate the concept of moral personality so as to bring out the exact significance of Martineau's statement.

4. How far do you consider the distinction of Society into social classes is : (*a*) an aid in the practical realization of the good, and (*b*) consistent with the principle of moral equality ?

Either,

5. " We have no psychological warrant for identifying ' Disinterested ' with either ' Free ' or ' Rational' action" : explain what you yourself understand by Free and Rational action, and give your own opinion regarding Sidgwick's position here, with your reasons.

Or,

"The relation of Duty and Happiness" : are there any grounds, inductive or deductive, on which it can be maintained that Happiness will follow the performance of Duty ? Discuss the question.

SECOND HALF.

Examiner—DR. H. STEPHEN, M.A., D.D.

Answer any THREE *of the following questions : they are of equal value.*

Either,

1. (*a)* Explain clearly the meaning of, and examine fully, each of the following statements:—

    (*a*) "Sociology is an interpretation of human society in terms of natural causation."

    (*b*) " Sociology is the science of the association of minds."

    (*c*) " The social mind is a concrete thing."

Or,

(*b*) " Sociology is essentially a Psychical Phenomenon that is conditioned by a physical process" : explain fully the meaning of this statement, and show that " the strictly sociological laws " are deducible from this principle.

2. The "primordial social fact" has been variously described as "division of labour," "alliance," "contract," "imitation," and "consciousness of kind": explain precisely the meaning of each, and examine the claim of each to be considered the first principle of sociology.

Either,

3. (a) Right, Morality, Ethicality: explain Hegel's distinction between them, and show how the distinction rises out of his philosophy in general. Explain also the statement that "a man's deeds constitute the very man." *Or,*

(b) Hegel's doctrine of the State: explain it fully, and explain the relation between the State and the Individual, showing in what the liberty of the Individual consists, and what Punishment means in Hegel's system.

4. Discuss the question whether the introduction of machinery has tended to improve or to depress the condition of the labouring classes.

5. State and discuss the principal questions rising out of the relation of employers and employees.

PHILOSOPHY.

LOGIC AS METAPHYSICS.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

All the questions are regarded as of equal value.

1. Expound after Fichte the grounds of Logic and its first principles in the Science of Knowledge. Explain and criticise Fichte's deduction of Reciprocal Determination, Causality and Substantiality, with their bearings on Realism and Idealism.

Or,

Explain and criticise Fichte's Deduction of Space and Time, and their ideality. Compare and contrast Fichte's Analysis of Time with Kant's, Lotze's and Bergson's.

2. Expound carefully the Logic of Fichte's Idealism, noting the dialectic process as it is successively applied to the idealistic construction.

Or,

Compare and contrast the Ego, the Non-Ego, and the Anstoss of Fichte with the *Atman,* the *Mayā* and the Vikshepa-shakti respectively of the Shankarites, and give a comparative estimate of these two systems of Metaphysics.

3. Criticise after Lotze the Herbartian type of Realism. In this connection discuss Herbart's view (1) of Things as simple qualities, (2) of the nature of Relations, and (3) of the psychical mechanism.

4. Explain Lotze's theory of the nature of physical action, and show how it is connected with his view of Law and Cause and of the Unity of Things. *Or,*

How would Lotze explain the Mechanism of the Idea? Compare Lotze and Bergson as regards their treatment of Mechanism and Teleology.

5. Explain Kant's view of the schematism of the pure concepts of the Understanding. Apply this schematism to the categories of Relation. What place does Kant give to the Transcendental Faculty of the Imagination in his Critique ?

Or,

Expound and criticise Kant's Deduction of the Categories. Compare this with one other Western, and with one Eastern, attempt to formulate a dialectic of Concepts or Categories.

6. Discuss the question of the necessity or otherwise of a metaphysical basis (1) of psychology, and (2) of Cosmology, in the light of Kant's critiques of the Psychological and the Cosmological Idea. Show in what respects Kant fails to solve the problem.

7. Discuss the question of the subjectivity of Space in connection with the problems of the Spatial Infinite and of the various deductions and systems of space. Criticise the positions of Kant, Hegel and Lotze from the standpoint of recent mathematical analysis.

PHILOSOPHY.

Logic as Metaphysics.

Second Paper.

Candidates are required to give their answers in their own words as far as practicable.

The questions carry equal marks.

Answer any FIVE *questions.*

1. On what grounds does Hegel identify Logic with Metaphysics ? What objections have been urged against such identification ? Examine the validity of these objections.

2. What is the aim and scope of the Dialectical method as employed by Hegel ? Explain briefly McTaggart's view of the method of Hegel.

3. Hegel has been accused of denying the validity of the Law of Contradiction. Is this accusation just ? Fully discuss the question.

4. Compare Kant's Conception of the Categories with that of Hegel.

5. Trace the development of the Categories from Substance to the Notion. Fully explain what Hegel means by the notion.

6. Explain Hegel's view of the relation between the different forms of Judgment.

7. How does Lotze effect the transition from Pluralism to Monism ? Compare his conception of the Absolute with that of Hegel.

PHILOSOPHY.

Logic as Epistemology.

First Paper.

Candidates are required to give their answers in their own words as far as practicable.

First Half.

Examiner—Babu Krishnachandra Bhattacharyya, M.A.

Answer three *only.*

The questions carry equal marks.

*Full marks—*50.

1. Need Logic postulate an absolutely valid mode of knowledge ? Should it assume that this valid mode is (*i*) simple apprehension, (*ii*) necessary thought ?

2. Is the content of an abstract idea intrinsically false or is it only a *part* of the truth ? Discuss the question.

3. In ' *A is B* ', is identity in any sense implied by the copula ? Bring out some of the senses in which the identity has been conceived.

4. In ' *A is not B* ' and ' *A may be B* ', do *not* and *may* stand for any objective content ? Discuss the question.

5. In what different senses is the conclusion of an inference taken as a *new* proposition ? Can inference be regarded as a complex judgment ?

Second Half.

Examiner—P. K. Chakrabarti, Esq., M.A.

Only three *questions are to be answered.*

All the questions are of equal value.

*Full marks—*50.

1. All *A* is *B*, All *C* is *A*, therefore All *C* is *B*.
Examine the *meaning* of *therefore* in the above argument.

2. Truth is the agreement of ideas and their combinations with their object and its relations.
Connexions of ideas are true when they follow such relations in the matter of ideas as are identical for all consciousness.
Examine the theories of truth suggested in the above extracts.

3. Are all relations subjective ? Examine the question with special reference to the views of Kant and Lotze.

4. It is out of the question that Reality should move and have its being in the forms of the Concept, of the Judgment or of the Syllogism which our thought assumes in its subjective efforts towards the knowledge of that reality. (*Lotze*).
Discuss the relation of logical forms to Reality, with special reference to Lotze.

5. Write a short essay on *necessary truths*, with special reference to Leibnitz, Mill, and Lotze.

46

PHILOSOPHY.

LOGIC AS EPISTEMOLOGY.

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Examiner—DR. P. K. RAY, D.SC.

Only THREE *questions to be answered.*

The questions carry equal marks.

1. Give a critical exposition of the conception of Material Logic and determine its relation to Inductive Logic and Science.
2. What is the relation (1) of Knowledge to Reality and (2) of Reality to Truth ? Discuss this question, noticing and criticising the views of the philosophers of different schools.
3. Analyse Causality and discuss the origin, nature and validity of "belief in universal causation," noticing and criticising differences of opinion.
4. Is there any distinction between an Induction and an Hypothesis ? Test any four of the following theories and state in the case of each, whether it is an induction or an hypothesis :—
    (1) The theory of gravitation.
    (2) The theory of conservation of energy.
    (3) The theory of the descent of man from lower animals.
    (4) The theory of a soul in man.
    (5) The theory of parallelism of psychical and physical states.
    (6) The mosquito theory of malaria.
    (7) The comma bacillus theory of cholera.
5. What is Explanation (1) in Science and (2) in Ethics ? Are there any limits to Scientific Explanation ? Fully discuss these questions, noticing and criticising differences of opinion.

SECOND HALF.

Examiner—BABU AMBICACHARAN MITRA, M.A.

THREE *questions to be answered.*

The questions carry equal marks.

1. Is Proof possible without Discovery ? Which of them constitutes the proper subject-matter of Logical Science ? Explain and illustrate the different forms of Proof as indicated by Lotze.
2. How far is the description of the Inductive Methods as Weapons of Elimination correct ? Can Induction be called the inverse process of Deduction ?
3. Distinguish between Demonstration, Induction, Probability, and Chance ; and show how they are related to Belief. Is Induction based on the theory of Probability ? Has Probability a subjective or an objective basis ?

4. Determine the character and place of Analogy as a mode of inference. How does Lotze try to show that ' there is no such thing as a proof by analogy ' ? Examine the view that ' analogy is the soul of induction.'

5. Distinguish between Natural and Artificial Classification, and estimate their relative merits. Show how in the systematic series Classification leads on to Explanation and finally to Speculative Thought or Philosophical Theory.

PHILOSOPHY.

SPECIAL BRANCH OF INDIAN PHILOSOPHY.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Examiner—DR. ADITYANATH MUKHERJEE, M.A., PH.D.

Only THREE *questions to be attempted,* ONE *from Group A and* TWO *from Group B.*

Full marks—50.

Questions are of equal value.

The candidate is expected to illustrate his answers by giving, where possible, analogues and parallels from European Philosophy.

GROUP A.

1. How would you prove that बोध is नित्य ? How would you distinguish ज्ञान from बोध ?

Or,

How does the Vedāntin criticise the Nyāya view of the relation of धर्मधर्मिभाव in respect of the nature of the Ātmā ?

2. How does the Vedāntin seek to obviate the difficulty of the oneness of the Ātmā in respect of सुखदुःखादिवस्था ? How does he refute the Sānkhya explanation of the latter ?

GROUP B.

3. Explain and criticise any *two* of the following similes:—

(a) पुरुषस्य दर्शनार्थं कैवल्यार्थं तथा प्रधानस्य ।
पङ्ग्वन्धवदुभयोरपि संयोगास्तत्कृतः सर्गः ॥

(b) वस्त्र-विशुद्धि-निमित्तं शौरस्य यथा प्रवृत्तिरन्यस्य ।
पुरुष-विमोक्ष-निमित्तं यथा प्रवृत्तिः प्रधानस्य ॥

(c) रङ्गस्य दर्शयित्वा निवर्त्तते नर्त्तकी यथा नृत्यात् ।

पुरुषस्य तथात्मानं प्रकाश्य निवर्त्तते प्रकृतिः ॥

4. Fully explain the doctrine of Causality as expounded in the following kārikā :—

असदकरणादुपादानग्रहणात् सर्वसंभवाभावात् ।

शक्तस्य शक्यकरणात् कारणभावाच्च सत् कार्य्यम् ॥

5. Explain the doctrine of Proofs (Pramānas) as developed by the Sānkhya-kārikā and the Tattva-kaumudi.

Or,

Expound the agnostic position of the Kāpila Sānkhya as regards the existence of God (Isvara), (i) from the metaphysical and epistemological, and (ii) from the ethical, point of view.

" SECOND HALF.

Examiner—DR. BRAJENDRANATH SEAL, M.A., PH.D.

All the questions are considered as of equal value.
Full marks—50.

1. Examine after the Sānkhya (1) the Shankara-Vedānta and Nyāya-vaisheshika views, (2) the Buddhistic views of the character and origin of the conditions and limitations (बन्ध) to which the individual Self is subject.

Or,

Expound the mutual relations of *Purusha* (the Self) and *Buddhi* (the Understanding) in Experience regarded (1) in its affective aspect (as *Bhōga*), and (2) in its cognitive aspect (as *Pramā*).

2. How does Rāmānuja refute the following positions :—

(a) that " thought " and " being " (अनुभूति and सत्ता) are identical;

(b) that the relations of ' knower' to ' knowing ' and of ' knower ' to the ' object known,' are unreal.

(c) that the real is an undifferentiated unity (निर्विशेषवस्तु).

Or,

Expound Rāmānuja's theory of Predication. How does Rāmānuja refute the Shankarite view of the import of propositions ? Illustrate the points at issue by reference to the following propositions :—(1) this is a cow, (2) Brahman is existence, intelligence and bliss, (3) That art Thou (तत्त्वमसि).

Cr,

Explain and examine carefully Rāmānuja's critique of ˙Anumāna (Inference) as employed in support of the theistic affirmation. How does Rāmānuja refute the pragmatic explanation of Brahma-vāda

(ब्रह्मवाद) as a mere postulate for practical ends, viz. those of spiritual discipline ?

3. Explain and criticise the following statements :—

(a) एकधर्मिणा ज्ञानन्दचैतन्योभयरूपत्वं न भवति दुःखज्ञानकाले सुखानुभवेन सुखज्ञानयोर्भेदात् । न च ज्ञानविशेषः सुखमिति वक्तुं शक्यते । ज्ञात्मस्वरूपज्ञानस्य ज्रखण्डत्वात् । ज्रतएव चैतन्यानुभवकाले सुखस्यावरणमपि वक्तुं न शक्यते । ज्रखण्डत्वेन ज्ञानन्दावरणे दुःखं ज्ञाना-मौत्यनुभवानुपपत्तेः ।

(b) ननु च भावरूपमज्ञानं वस्तुयाथात्म्यावभासरूपेण शान्तिचैतन्येन विरुध्यते । मेवम् शान्तिचैतन्यं न वस्तुयाथात्म्यविषयम् ज्रपि तु ज्रज्ञान-विषयम् । ज्रन्यथा मिथ्यार्थावभासानुपपत्तेः । न हि ज्रज्ञानविषयेण ज्ञानेन ज्रज्ञानं निवर्त्तेते इति न विरोधः ।

PHILOSOPHY.

Special Branch of Indian Philosophy.

Second Paper.

Candidates are required to give their answers in their own words as far as practicable.

First Half.

Examiner—Dr. Brajendranath Seal, M.A., Ph.D.

The questions are of equal value.

Answer any three.

1. (i) In what sense are विषय and its प्रमाता said to be one in प्रत्यक्ष ? (ii) Is सुख perceived through a वृत्ति ? Discuss the question.

2. In युक्तिरसतमम्, in what sense, if at all, has रजस a सत्ता ? Discuss the Vedantic view as against rival views.

3. ज्रनुमानमन्वयिरूपम् एकमेव न तु केवलान्वयि ।

Critically present the logical theory implied in the above and contrast it with the Naiyāyika theory of inference.

4. Distinguish the Vedantic view on the question of the स्वपौरुषेयत्व of वेद from other views, and bring out the significance of the question for modern thought.

5. भूतले घटो न । Is this ज्रभाव-ज्रनुभव to be taken as a form of प्रत्यक्ष ? Discuss the nature of ज्रभावज्ञम .

SECOND HALF.

Examiner—BABU KRISHNACHANDRA BHATTACHARYYA, M.A.

1. Discuss the meaning of Adhyāsa in Shankara's system (1) from the psychological, (2) from the epistemological, and (3) from the ontological point of view. Show clearly how this principle of Adhyāsa is applied (*a*) to the explanation of the World-Appearance (Prapancha-bibhrama) and of the relation between the Absolute (Brahma), the individual soul (Jiva) and the world (Jagat) ; and (*b*) to the determination of the real nature of Liberation (Mukti) and the Way of attaining such Liberation.

Or,

Expound carefully, from the psychological as well as the metaphysical standpoint, Shankara's position with regard to the means of the attainment of Moksha (Liberation), and his criticisms of the principal Purva Mīmānsā positions.

In this connection explain clearly the types of Intellectualism and Pragmatism represented by Shankara and the different Mīmānsā schools, and show how far they correspond to the typical forms of the Intellectualism and Pragmatism of to-day.

2. How does Shankara refute the following objections to the thesis that Brahma is the cause of the world :—

(1) the disparateness of the Intelligent First Cause with Unintelligent Matter ;

(2) the purposelessness of the Creative act or process ;

(3) the inequitableness and the cruelty (Vaishamya-naīrghriṇye) implied in the existing distribution of happiness and unhappiness in Creation.

Discuss Shankara's answer in 'each of these cases in the light of the treatment of the same problem in the post-Kantian types of Theism in the West.

Or,

Expound Shankara's criticism of *any three* of the following types of thought : (1) Subjective Idealism, (2) Phenomenalism, (3) Nihilism, (4) Relativism, and (5) Evolutionism (Parināma-vāda), and compare carefully Shankara's treatment with that of the Absolute Idealists generally in the post-Kantian European philosophy.

3. Expound *any two* of the following arguments :—

(*a*) ननु ज्ञानं नाम मानसी क्रिया । न, वेलक्षण्यात् । क्रिया हि नाम सा यत्र वस्त्वस्वरूपनिरपेक्षैव चोद्यते पुरुषचित्तव्यापाराधीना च । ज्ञानन्तु प्रमाणजन्यम् । प्रमाणन्तु यथाभूतवस्तुविषयम् । अतो ज्ञानं कर्त्तुमकर्तुं-मन्यथा वा कर्तुं न शक्यम् । केवलं वस्तुतन्त्रमेव तत्, न चोदनातन्त्रं नापि पुरुषतन्त्रम् ।

(*b*) अर्थौ चार्थ्यान्योन्याभिन्नौ लक्ष्येते । यदि अर्थिनः स्वतोऽन्योऽर्थो न स्यात् यस्यार्थिनो यद्विषयमर्थित्वं च तथार्थौ नित्यसिद्ध इवेति तस्य तद्विष-यमर्थित्वं न स्यात् ।... ... सम्बन्धिशब्दो ह्येतौ अर्थौ चार्थ्येति । द्वयोश्च सम्बन्धिनोः सम्बन्धः स्वानेकस्यैव । तस्मादर्थिनौ एतौ अर्थार्थिनौ, तथा अनर्थानर्थिनावपि ।

(c) हतौ हि प्रतिसंख्याप्रतिसंख्यानिरोधौ सन्तानगोचरौ वा स्यातां भावगोचरौ वा । न तावत् सन्तानगोचरौ सम्भवतः सर्व्वेष्वपि सन्तानेषु सन्तानिनामविच्छित्तेन हेतुफलभावेन सन्तानविच्छेदस्यासम्भवात् । नापि भावगोचरौ । न हि भावानां निरन्वयो निरुपाख्यो विनाशः सम्भवति सर्व्वास्ववस्थासु प्रत्यभिज्ञाबलेनान्वयविच्छेददर्शनात् ।

PHILOSOPHY.

PSYCHOLOGY.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

*Examiner—*DR. P. K. RAY, D.SC.

Only THREE *questions to be answered.*

The questions carry equal marks.

1. Is Psychology a natural Science ? Fully discuss the question, noticing and criticising the views of the leading philosophers and defending your own view.

2. Fully state the problem of Sense-Perception in all its aspects, and discuss, noticing and criticising different views as regards the nature of the percipient Subject and the perceived Object.

3. Analyse the Religious Sentiment and trace its growth and development. Fully discuss the nature of the object, if any, which it implies.

4. State the meaning and implications, if any, of " consciousness of freedom." How is freedom reconciled with psychological laws ? Fully discuss the question, noticing and criticising the views of the leading philosophers.

5. Discuss the origin, nature and validity of belief in an external world as a reality.

SECOND HALF.

*Examiner—*BABU HARIDAS BHATTACHARYYA, M.A.

Only THREE *questions are to be attempted.*

All the questions carry equal marks.

1. Trace the history of Associationism in British Psychology down to Spencer, noting the contributions of each thinker.

Or,

Give a critical estimate of Associationism as a theory of Mental development.

2. Discuss the differentiation of Subject and Object, noticing and criticising the views of Spencer, Wundt and James. '

3. Enumerate the conditions of Attention and discuss the theories of the relation between Attention and Interest.

4. Institute a comparison between the presentative and the affective element of a sensation with reference to—

   (i) the characteristics of each;

   (ii) the physiological basis of each ; and

   (iii) the relation between the two.

5. (a) Describe a typical case of Animal Instinct and show how it differs from a human action guided by reason.

   (b) How has the relation between Instinct and Intelligence been understood by Wundt, Lloyd Morgan and Bergson ?

Or,

   (a) Discuss how far animals have reason and higher sentiments.

   (b) What light does training for shows as in a circus throw upon the mentality of animals ?

PHILOSOPHY.

PSYCHOLOGY.

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

All the questions are considered as of equal value.

FIRST HALF.

Examiner—DR. BRAJENDRANATH SEAL, M.A., PH.D.

Full marks - 50.

Only THREE *questions are to be answered out of the five in this half paper.*

1. Give an account of any two of the following :—

        (a) attention,

        (b) apperception,

        (c) imagination,

        (d) recognition,

viewing each (1) as a reactive, (2) as a relational, and (3) as an affective element, process or state.

2. Explain any three of the following, applying the Weber-Fechner Law wherever possible :—

   (a) the varying scenic effects of changing illumination,

   (b) the æsthetic effect of the golden section,

   (c) the laws of visual adaptation and contrast,

   (d) the so-called hedonistic calculus (estimation of pleasure-values).

3. Analyse any *three* of the following :—

   (a) your own ideational type,

   (b) your æsthetic enjoyment of a tragedy.

(c) your temperament,

(d) any incipient disintegration of your personality in the experience of moral struggle and temptation.

(e) your last-remembered dream,

and discuss the results in the light of general psychological principles.

4. Give in brief outline the theory of mental measurement with typical illustrations.

5. Discuss any *two* of the following :—

(a) the nature, laws and classes of psychic compounds,

(b) the relation of quality of sensation to quantity (intensity and duration),

(c) the relation of feeling-tone to sensation,

(d) the curve of fatigue,

(e) the perception of a musical chord, in relation to the question of fusion and synchronousness,

(f) the specious present,

(g) relational feelings as presentations,

(h) the theory of association centres and tracts.

SECOND HALF.

Examiner—DR. N. N. SEN GUPTA, M.A., PH.D.

The figures in the margin indicate full marks.

1. Critically examine the methods used in the investigation of 16 Feelings, with special reference to the value of their results. Mention the appliances whenever possible.

Or,

Critically examine *two* of the following :—

(a) Feeling is a mode of reaction of apperception upon sensations.

(b) Feeling is the outcome of conflict between " ideas."

(c) Feeling is undeveloped sensation.

(d) Feeling is the psychic aspect of instincts.

2. Critically examine *two* of the following :— 16

(a) Emotion is the outcome of fusion between sensation and feelings.

(b) Emotion is a complex of feelings.

(c) Emotion is the fixed psychosis corresponding to instinct.

(d) Emotion is the cause of physical expressions accompanying it.

Or,

State and examine the leading views concerning the nature of instinct.

3. Write notes on *three* of the following :— 18

(a) Reflex arc.

(b) Reflex action time.

(c) The neurone theory.

(d) Compounding of Reflexes.

(e) Behaviour of spinal animals.

(f) Ideo-motor action.

, *Or,*

Discuss *two* of the following :—

　(*a*) Reaction experiments.
　(*b*) Feeling of Innervation.
　(*c*) Will as the prolongation of feeling.
　(*d*) Criteria of volitional behaviour.

PHILOSOPHY.

EIGHTH PAPER.

Examiner—DR. BRAJENDRANATH SEAL, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

Write an Essay on *any one* of the following subjects, noticing the more important types of thought and speculation, Eastern as well as Western, on the topic you select :—

　(*a*) Time and Eternity.
　(*b*) The Philosophy of Change, with a comparative estimate of Buddhism and Bergsonism.
　(*c*) Personality and Personal Identity, with a critical examination of the facts of Abnormal Psychology bearing on the subject.
　(*d*) Instinct, Intuition and Intelligence, their place and value in a philosophical view of Experience and its testimony.
　(*e*) Romanticism *versus* Absolute Idealism in philosophy.
　(*f*) The Existential Interpretation of Propositions.
　(*g*) The Principle of Negation (Abhāva) in Logic and Dialectic.
　(*h*) The Ethics of Property and its uses : a philosophical discussion in the light of the contrasted principles of Individualism and Socialism.
　(*i*) The Idea of a suffering God considered in the light of Evolution in History.
　(*j*) Value-judgments and their kinds, with the elements of a philosophical Theory of Value.

ECONOMICS.

FIRST PAPER.

Six questions only to be answered ; three to be taken from each half.

Candidates are required to give their answers in their own words as far as practicable.

The questions carry equal marks.

FIRST HALF.

Examiner—C. J. HAMILTON, ESQ., M.A.

　1.　Explain carefully how the Equilibrium between Demand and Supply in a market is established. Illustrate your answer by a diagram. State clearly the difference between the theory of market value and the theory of barter.

2. Define Rent. Consider the statement that "rent does not enter into price." "Rent is a species of a large genus." Explain this statement and show how the element of Time has to be taken into account in determining what is and what is not rent.

3. Explain fully the essentials of a good Banking system. What evils are likely to result from an inflation of the Currency ?

4. Discuss the various causes that have been suggested to account for Crises. What are the best means for preventing such occurrences ?

5. Carefully explain the functions performed by Commercial Bills. Distinguish them from Finance Bills. What will be the probable effect on the trade of a country of a depreciated Currency ?

SECOND HALF.

Examiner—PRAPHULLACHANDRA GHOSH, ESQ., M.A., B.SC.

1. Discuss the relation of economics to the other social sciences. In what way can money be considered as the measure of the motive to economic action ?

2. State carefully what is meant by increasing and by decreasing returns. Criticize the statement that in agriculture we have decreasing returns and in manufacture increasing returns.

3. Given the possibility of selling the same commodity at different prices, show how prices would be settled under conditions of monopoly.

4. What is capital, and what constitutes the demand for capital ? Give the reasons why writers on taxation object to taxes on capital.

5. Examine the effects on the distribution of the burden of war expenditure according as the expenditure is met by, (1) increased taxation, (2) borrowing. What is the best method of meeting this expenditure, and why ?

ECONOMICS.

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The questions carry equal marks.

FIRST HALF.

Examiner—P. ANSTEY, ESQ., M.A.

Full marks—50.

(*Answer any* THREE *questions*).

1. Discuss the statement that "rising prices seem to cause prosperity, falling prices adversity."

2. Examine the nature and limits of the influence of credit on prices. How do you reconcile the influence of credit instruments and deposits on prices with the theory that the value of money varies with its quantity ?

3. How do you measure the gain accruing to a country from its foreign trade ?

Discuss the proposition that "the more countries enter into a trade, the greater is the total gain, and there is a reasonable hope for a greater net gain to all the countries concerned."

4. What is meant by a "free market in gold"? How far, in normal times, does such a free market exist in London, Paris, and New York?

5. "There is a possibility that the imposition of an import duty might disturb the equilibrium of international demand and supply, and might lead to a readjustment by which the duty-levying country will gain."

Examine the above statement, and show how far it can be used as an argument in favour of Protection.

SECOND HALF.

Examiner—J. C. COYAJI, ESQ., B.A.

Full marks—50.

(*Answer any* THREE *questions*).

6. Discuss the evil effects resulting from the want of connexion between the market rate and the Bank rate of discount in England. On what lines has it been proposed to bring, the market rate and the Bank rate into touch?

7. "The wares of commerce follow the drafts of commerce." Discuss.

Show how the immense international trade done by England is in a great measure due to her unrivalled banking system.

8. How far can labour combinations and industrial combinations of firms be regarded as co-ordinate aspects of a general combination movement?

9. "It is not only in commercial matters, but also in industrial ones that the speculator exercises a dominant influence. He controls production as well as trade."

Comment on the above statement, and discuss the service which legitimate speculation is able to render to the community.

10. Discuss the factors which assist in bringing about the introduction of differential charging in the case of railways. How far, and on what grounds, is such discrimination between different places and districts justifiable?

ECONOMICS.

THIRD PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt the FIRST *question and* TWO *others from each half.*

FIRST HALF.

*Examiner—*P. MUKHERJEE, ESQ., M.A.

1. Discuss in all its aspects the general political principles on 18 which you would justify or oppose the passing of a measure like the Bengal Juvenile Anti-Smoking Bill.

2. (a) Explain *either* of the following propositions of Green:— 16
   (i) Will, not force, is the basis of the state.
   (ii) Though primarily preventive, punishment is not merely preventive.

   (b) Is the Social Contract Theory entirely valueless as an explanation of the origin of the state ?

3. How does Mill prove that Representative Government is ideal- 16 ly the best government ? What safeguards does he suggest to avoid its possible evils ? What, if any, are the special difficulties of introducing Mill's system of representative government in India ?

4. Discuss some of the more important theories about Liberty 16 and show how " the unlimited sovereignty of the state is not hostile to individual liberty."

5. Discuss some of the results of the application of biological 16 principles to the study of political institutions.

SECOND HALF.

*Examiner—*D. CHATTORAJ, ESQ., M.A.

1. " Imperialism is a depraved choice of national life " (*Hobson*). 18 Discuss this statement with special reference to Imperialism as an ideal in modern Politics.

2. ' The general will is sovereign.' Discuss this theory of sover- 16 eignty with special reference to the teaching of T. H. Green on the subject.

3. Discuss the nature of Public Opinion. How far is it true to 16 say that government rests on opinion ? Mention some of the more important organs of public opinion, noting their respective strength.

4. In what different forms has the theory of ' Natural Rights ' 16 been adopted ? Discuss the more important heads of a statement of ' Natural Rights.'

5. " The only part of the conduct of any individual for which he 16 is amenable to society, is that which concerns others. In the part which merely concerns himself, his independence is, of right, absolute " (*Mill*). Give a general estimate of Mill's theory of Individuality, with a brief reference to the teaching of Green and Sidgwick on the same subject.

ECONOMICS.

FOURTH PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Examiner—B. MUKHERJEE, ESQ., M.A.

Full marks—50.

Attempt any THREE *out of the following five questions, which carry
equal marks.*

1. Differentiate the constitutions of Canada, Australia and South
Africa. Why is the constitution of the last called a "Union"? How
is a *Union* distinguished from a *Federation*?
2. Describe the steps which have been taken or suggested for con-
solidating the British Empire? Discuss the feasibility of the suggested
steps.
3 Give the main outlines of the scheme of the constitutional reforms
introduced in India in 1909. Discuss its merits and defects. How far has
the object aimed at by its authors been attained?
4. State clearly the principles underlying the system of Provincial
finance. Examine the objections which are usually urged against the
policy of making lump grants from Imperial to Provincial?
5. Under what conditions and limitations are taxation and borrow-
ing by Provincial Governments in India permissible.

SECOND HALF.

Examiner—DR. PRAMATHANATH BANERJEE, M.A., D.SC.

Full marks—50.

THREE *questions only to be attempted.*

All questions carry equal marks.

1. Discuss the advantages and disadvantages of a Second Chamber.
Give an outline plan for constructing a Second Chamber in England.
Should the Indian Legislature consist of two Houses or of only one?
2. Compare and contrast the English Party System with the Group
System which exists in some of the countries of Continental Europe.
3. Discuss the status and powers of (*a*) the Prime Minister, and (*b*)
the Cabinet, in the law and the custom of the British Constitution.
Compare the position of the British Premier with that of the Imperial
Chancellor of Germany.
4. 'Financially the work of the House of Commons is rather super-
vision than direction.' Comment on this statement. Discuss the va-
rious devices adopted in England for securing a sound administration of
national finance.
5. Compare the *droit administratif* of France with what Dicey calls
the "English rule of law."

ECONOMICS.

GROUP A.

FIFTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

SIX *questions only to be answered,* THREE *to be taken from each half.*

The questions carry equal marks.

FIRST HALF.

Examiner—C. J. HAMILTON, ESQ., M.A.

1. Economic facts and theories exert reciprocal influence on one another. Examine and illustrate this statement.

2. (a) How far is John Stuart Mill's theory of value final and complete ?
   (b) Discuss the correctness of the following remark—" Mill so qualified and amended the doctrines of Ricardo that the latter could scarcely have recognized them."

3. Give an account of the socialistic doctrines of Karl Marx.

4. Make a critical estimate of the writings of W. S. Jevons.

5. What do you know of any *three* of the following :—
   (a) Schmoller, (b) Cairnes, (c) Bernstein, (d) Bastial, (e) Cliffe Lester, (f) Wagner ?

SECOND HALF.

Examiner—JOGISCHANDRA SINHA, ESQ., M.A.

1. Account for the industrial supremacy of England towards the middle of the 19th century.

2. (a) How far are modern trade unions " the real and legitimate descendants" of mediæval craft guilds ?
   (b) Describe the chief features in the history of English trade unionism since 1834.

3. (a) Trace the progress of Free Trade in England during the 19th century.
   (b) What were the chief causes of the rapid expansion of England's foreign trade during the period 1850-73 ?

4. (a) What were the circumstances that led to the appointment of the Bullion Committee of 1810 ?
   (b) State the chief conclusions of the Bullion Committee's Report.

5. Write notes on *any four* of the following :—
   (a) The Trade Boards Act of 1909.
   (b) The Old Age Pensions Act of 1908.
   (c) The National Insurance Act of 1911.
   (d) The Workmen's Compensation Acts of 1897 and 1906.
   (e) The Poor Law Amendment Act of 1834.
   (f) The Factory Act of 1833.

ECONOMICS.

GROUP A.

INTERNATIONAL TRADE

FIRST PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions are of equal value.

FIRST HALF.

Examiner—J. C. COYAJEE, ESQ., B.A.

Full marks—50.

Answer any THREE *questions.*

1. " The problem of international value consists in the determination
of the conditions governing the division of the double cost of carriage
between the countries concerned." Discuss.
How far, and why, are values differently determined in International
and Domestic trade ?

2. Show some of the advantages to a country of foreign commerce.
How far, and why, are the money incomes prevailing in a country the
correct index of such gain ?

3. " The total stock of money material must be divided between
countries in such a way as to keep up that state of trade which would
exist under a pure barter system."
Explain and comment on the above.

4. Examine how the form of statement of the Infant industry argu-
ment has altered since Mill's days. Does the argument apply to (*a*) old
and developed countries, (*b*) to agriculture ?

5. How far is it true that Exchanges have a tendency to return to
par ? State why it is necessary, nevertheless, to employ " correctives "
of the course of Exchange, and discuss the nature of such " correctives."

SECOND HALF.

Examiner—G. F. SHIRRES, ESQ., M.A.

Full marks—50.

Answer Question 6, *and* TWO *others.*

6. Explain carefully the theory and practice of the working of bills
of exchange in international trade.
" To those engaged in the Indian export trade the inevitable rise in
exchange of about one penny becomes a severe penalty, and more so in
view of the large amount of Bills, principally in goods of national
importance that are unsold " (*Englishman,* April 12, 1918). Explain
this fully.
What do the Exchange Banks mean when they say that it is difficult
to arrange for adequate cover at the present time ?

7. How far and under what circumstances is a favourable balance of trade an indication of real gain to a country? Illustrate your answer by examining the favourable balance of trade of India during the present war.

8. Consider, briefly and broadly, the various methods of giving a preference to inter-Imperial trade, and the economic difficulties which they respectively present.

9. (a) " To restrict imports is to restrict exports."

(b) " All prosperous nations import more than they export."

(c) " The total imports of the world exceed in value its total exports."

Compare and examine these statements with special reference to India.

10. What economic inferences may be drawn from the statistics of the foreign trade of a country? To what defects are those statistics most frequently liable?

ECONOMICS.

INTERNATIONAL TRADE.

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Examiner—J. P. NIYOGY, ESQ., M.A.

Full marks—50.

All questions carry equal marks.

Answer any THREE *questions.*

1. Examine the arguments. advanced in Germany for agricultural protection and show how German agriculture has been affected by protection.

2. Discuss the main causes of the prevalent hold of Protection in America. To what extent does the Tariff of 1913 represent a reaction from extreme protectionist views?

3. Examine the arguments for and against Protection in India and illustrate your answer by examining the conditions of some of India's leading industries.

4. Estimate the advantages of commercial treaties by studying the effects of (a) English treaties with foreign countries in the middle of the 19th century, (b) treaties made by Germany in the nineties.

5. Under what conditions can a policy of Retaliation be successfully carried out? Illustrate your answer from the history of tariff wars.

47

SECOND HALF.

Examiner—E. A. HORNE, ESQ., M.A.

Full marks—50.

The questions are of equal value.

THREE *questions only to be attempted.*

1. What proposals have been put forward for an Imperial Customs Union of the British Empire ? Has the present war made such a union (a) more desirable, (b) more attainable ? If so, in what respects ? Consider especially the position of India in such a union.

2. Give a brief account of the restrictions maintained by England in 1820 in her foreign and colonial trade and navigation. Indicate how they were successively removed.

3. With what different objects in view have export duties been imposed ? Give examples, stating in each case how far, in your opinion, the duty was justified.

4. "The Napoleonic Wars exercised the same influence upon subsequent commercial policy in France as the Civil War in the United States." Discuss this statement carefully in its bearing on French and American tariff history, respectively.

5. Write short explanatory notes, giving examples, on *each* of the following :—specific duties—conventional tariff—surtaxes d'entrepot—drawbacks.

ECONOMICS.

GROUP A.

MATHEMATICAL ECONOMICS.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

Only FIVE *questions to be attempted, but not more than* THREE *from any one half.*

The questions carry equal marks.

FIRST HALF.

Examiner—PRAPHULLACHANDRA GHOSH, ESQ., M.A., B.C.

1. What is the rate demand curve ? Discuss carefully its form and its algebraic expression. How is consumer's surplus usually represented ? Does it necessarily follow the area so shown accurately represents the consumer's surplus ?

2. Assume the form of the zero utility curve (u_0), and show how the remaining utility curves are related to it, when the marginal utility of money—(1) is constant, (2) is not constant.

3. Assume the integral demand curve, and show graphically how a curve showing the changes in the elasticity of demand as the quantity increases may be constructed.

4. The standard of living of a group remains constant but the efficiency changes. Show how the number of the group may be expected to alter. State exactly what you mean by efficiency and standard of living, and describe the conditions under which the result you indicate would be realized.

5. An industry is made up of a number of competing firms. Discuss the effect of the formation of a monopoly (or trust) of this industry upon the price of the commodity, (1) when the economy effected by monopolization is the saving of a definite sum per annum, (2) when the economy is a sum proportional of the output.

Second Half.

Examiner—S. Jevons, Esq., M.A.

1. Explain, with the aid of a diagram, the nature of the " contract curve " in the theory of exchange; and show how the usual form of demand curve of an individual for a commodity may be indicated upon the diagram which you use to illustrate the contract curve.

2. Explain clearly the theory of quasi-rent in connection with : (1) the cyclical fluctuations of trade, (2) conditions created by war.

3. Give a broad outline of the theory of marginal efficiency as a general principle of the distribution of wealth.

4. Draw up a summary or tabular statement showing in proper order and importance all the causes which affect the demand for and supply of one particular grade of labour, using as an example for illustration the case of *either* (1) a weaver in a cotton mill, *or* (2) a fitter who assembles parts of machines in an engineering workshop. The illustration may be considered as being either in India or in England.

5. Assume an isolated country, like Kashmir, or an island with little or no foreign trade, in which manufactures are partially developed and improved practice in agriculture is being diffused, and in which zemindari land tenure with temporary settlement prevails. Also assume that the land revenue demand is increased by ten per cent three times at intervals of three years. Trace out the probable results upon rents, agriculture and consumption during this period and the following ten years.

ECONOMICS.

GROUP A.

MATHEMATICAL ECONOMICS.

SECOND PAPER.

Examiner—PRAPHULLACHANDRA GHOSH, ESQ., M.A., B.C.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions carry equal marks.

*Only FIVE questions to be attempted, but not more than THREE from
any one half.*

FIRST HALF.

1. With the help of Marshall's curves for international trade can you show that " a nation is more likely to benefit itself by an export than an import tax " ?

2. Show how the formula $MV = P.T.$ may be derived from two methods of expressing the total sales in a period of time.

3. What is an index number ? Discuss briefly the construction of Jevon's and of Sauerbeck's Index numbers.

If $P_0 P_1 \ldots$ be the price ratios and $q_0 q_1 q_2 \ldots$ be the quantities of commodities sold during the base year, year one, etc., then show that the two formulæ for Index Numbers,

$$\frac{\Sigma P_1 q_1}{\Sigma P_0 \, \Sigma q_1}, \text{ and } \frac{\Sigma P_1}{n},$$

where n is the number of commodities selected, differ by a small quantity if n is large.

4. What is Interest, and how is it determined by the supply and demand for capital ?

Find a formula for the present value of an annuity of Re 1 for n years at $r\%$ interest.

5. An island having a gold currency and indebted to foreign nations imposes a 1000 per cent. *ad valorem* export duty on all commodities, including gold and gold coin. If no gold is produced in the island, what will be the effect on prices within the island and on the export trade ?

SECOND HALF.

1. How does the quantity theory of money as expounded by Prof. Fisher fit into the ordinary theory of the determination of the value of things by demand and supply ?

2. Discuss the incidence of " rates " upon shops and upon houses.

3. What difference would you expect in prices and trade of a tax on imports and a bounty on imports ?

" Bounties, an invention of modern times, are the opposite of taxes." [*Gevenot*]. Criticize this statement.

4. Write a short account of the advantages of the use of Mathematics and Statistics in the study of Economics.

5. "There is only one commodity which presents no residual utility, because its total utility is equal to its mass multiplied by its final degree of utility, which is constant. This commodity is money..." [*Pantaleoni.*] Discuss this.

ECONOMICS.

GROUP A.

BANKING.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The question carry equal marks.

FIRST HALF.

Examiner—S. JEVONS, ESQ., M.A.

Full marks—50.

Answer any THREE *questions.*

1. What exactly is meant by the movement of amalgamation and absorption of banks in England ? What have been its economic basis, and its commercial results ? Has any analogous movement occurred in India ?

2. Enumerate and describe the different kinds of co-operative credit societies and building loan associations, and compare their place in the economic fabric of a country with that of the commercial banks.

3. Examine the chief difficulties in the construction of Index Numbers of prices and discuss the necessary limitations of their accuracy and utility.

4. Explain what would probably have happened to the Indian Exchange and Currency during the first four years of the war if a free market in exchange had been permitted. Indicate the principal causes of the heavy balance of indebtedness inwards which has lately developed. Was this the cause of the Secretary of State raising the price of Councils to 1s. 5d. and recently to 1s. 6d. ?

5. Compare the present state of the Russian currency with that of France during the Revolution, or with that of any South American republic when suffering from an over-issue of paper money.

SECOND HALF.

Examiner—J. C. COYAJI, B.A., LL.D.

Full marks—50.

Answer any THREE *questions.*

6. On what different lines and with what success have attempts been made to formulate Standards of Deferred Payments which would secure equity in the payment of debts ?

7. How does a fall in the purchasing power of money tend to affect, if at all, (1) the prices of the funds, (2) the prices of real estate, (3) the price of gold and silver ornaments, and (4) the rate of interest ?

8. Discuss the defects of the National Banking system of the United States of America before the passing of the Federal Reserve Act of 1913. Describe the changes introduced by the Act into the banking and currency system of that country.

9. Compare the work and functions of the Bank of England and the Reichsbank. Show how the differences in the German and English banking systems correspond to the differences in the business habits and in the money market conditions of the two countries.

10. Give a brief account of the financial crisis in London in 1914. What measures were taken to relieve the money market and the banking system of England from the incubus of foreign bills ?

ECONOMICS.

GROUP A.

BANKING.

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The questions carry equal marks.

FIRST HALF.

Examiner—BIJAYKUMAR SARKAR, ESQ., M.A.

Full marks—50.

Answer any THREE *questions.*

1. " The quantity theory is often defended and opposed as though it were a definite set of propositions that must be either true or false. But in fact the formulae employed in the exposition of that theory are merely devices for enabling us to bring together in an orderly way the principal causes by which the value of money is determined. As to what these principal causes are, competent writers of all schools are, I venture to think, really in substantial agreement."—*Pigou.* Comment on this as fully as you can.

2. National progress does not depend on price movements. Discuss.

3. " It by no means follows, however, that absence of equality of payments causes immediate movements of gold."—*Conant.* If not, why not ? Can you illustrate the truth of this statement from the history of the present war ? What light does it throw on the Ricardian theory of the distribution of the precious metals ?

4. " The volume of currency does not depend, as some critics have maintained, on the caprice of the India Office in the amount of Council Bills that it offers for sale....It is quite independent of the Secretary of State's action."—*Keynes.* Discuss.

5 What are the causes underlying the issue of Rs. 1/2½ notes ? What do you think of the apprehension that they will lead to an inflation of the currency ?

SECOND HALF.

Examiner—E. A. HORNE, ESQ., M.A.

The questions are of equal value.

THREE *questions only to be attempted.*

1. "A rise in the value of money tends to lower the prices of all securities." Explain, and illustrate this proposition. How does a fall in the prices of securities react on banking business ?

2. Show clearly the manner in which an influx of new gold raises prices in the first instance, and trace the subsequent stages by which a trade boom is brought about. What are the factors which bring about the inevitable reaction ?

3. What is the best definition of Currency ? Does it include paper money ? If so, what kinds of paper money ? To what extent do Stock Exchange securities form part of the currency of international trade ? Give instances.

4. Give a brief history of the Gold Standard Reserve, noting any changes which have been made in the policy pursued with regard to it. On what occasions has it been made use of ?

5. What do you know of Ricardo's proposals for " an economical and secure currency " ? What similar proposals (*a*) on a bimetallic, (*b*) on a gold basis, have at different times been put forward, with a view to giving greater stability to the standard of value ?

ECONOMICS.

GROUP B.

FIFTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

Only SIX *questions may be attempted, of which three must be taken from each half.*

The questions are of equal numerical value.

FIRST HALF.

Examiner—ARTHUR BROWN, ESQ., M.A., LL.D.

Full marks—50.

1. Discuss the extent to which political philosophers may profitably make use of biological theories to account for the history and form of political institutions.

2. "It is a truism that dogma never takes definite shape, save as a result of its denial by some thinker or leader." (*Figgis*). Comment from the point of view of the history of political thought.

3. Discuss how far Hobbes uttered truths applicable at the present day and how far his views were purely ephemeral.

4. " But the importance of this theory (i.e. of the Law of Nature) to mankind has been much greater than its philosophical difficulties would lead us to expect. Indeed it is not too easy to say what turn the theory of thought and therefore of the human race would have taken if the belief in a law natural had not become universal in the ancient world." (*Main*—" Ancient Law.") Comment.

5. Discuss the origin of the Social Contract theory of the state.

SECOND HALF.

Examiner—P. MUKHERJEE, ESQ., M.A.

Full marks—50.

1. " Aristotle's Politics is at once the portraiture of an Ideal State and a Statesman's Manual." Discuss this statement.

2. " The dividing line between the ancient and modern political theory must be sought, if anywhere, in the period between Aristotle and Cicero." Substantiate or criticise this statement.

3. Explain and critically examine the following prepositions :—

(*a*) " A punishment is an evil inflicted by public authority on him that hath done or omitted that which is judged by the same authority to be a transgression of the law, to the end that the will of men may thereby be better disposed to obedience." (*Hobbes*).

(*b*) " The beginning of politic society depends upon the consent of the individuals to join into and make one society, who, when they are thus incorporated, might set up what form of government they thought fit." (*Locke*).

4. " The *Prince* is the most direct contribution ever made to the secularization of politics." (*Morley*). Establish this proposition, illustrating your answer, where possible, with typical quotations.

Or,

" The doctrines of Rousseau are fatal to true individual liberty." (*Tozer*). Substantiate or criticise this proposition.

5. Write a short essay on *one* of the following :—

(*a*) Individualism in politics;

(*b*) Utilitarianism in politics;

(*c*) The influence of physical environment on social and political institutions.

ECONOMICS.

GROUP B.

COMPARATIVE STUDY OF POLITICAL INSTITUTIONS.

FIRST PAPER.

Examiner—PRAMATHANATH BANERJEE, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Candidates are required to answer SIX questions in all, and not more than six. Three to be attempted from Group A and three from Group B.

All questions are of equal value.

GROUP A.

1. " Plato's state, though ideal, is not designed as a Utopia; it is not a fancy state but a pattern state," Examine this statement.

2. " Inductive political science must now admit that the democracy of Athens does not deserve the position which the delusion of centuries has been good enough to assign to it in the history of mankind." Support or refute this remark.

3. " Greek and Roman colonies had nothing in common." Discuss.

4. How far is it true to say that the Constitutional History of republican Rome turns on the restriction of the imperium ?

5. What are the various agencies by which Law is brought into harmony with Society ?

6. What do you know of the Patriarchal theory of Maine ? Do you agree with Sidgwick that " Maine's patriarchal theory, in its final form, has undergone a material change " ?

GROUP B.

7. " Polybius regards the constitution of Rome as a combination of the three forms of government—Monarchy, Aristocracy, Democracy. Examine his dictum.

8. Expand the idea that the Papacy is the ghost of the Roman Empire sitting crowned on its grave.

9. In what sense is it true to say that Feudalism is the negation of all that we hold to be the most important in the Conception of the State and Citizenship ?

10. Compare Italian city communities with those of ancient Greece.

11. " The Roman Empire is commonly regarded as the transition from ancient to mediaeval and modern history" (*Sidgwick*). Why ?

12. To what causes would you attribute the downfall of the ancient City State ?

13. Did ' Law ' in the Austinian sense of the term exist during the Middle Ages ?

ECONOMICS.

GROUP B.

COMPARATIVE STUDY OF POLITICAL INSTITUTIONS.

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only SIX *questions may be attempted, of which* THREE *must be taken from
each half.*

The questions carry equal marks.

FIRST HALF.

Examiner—ARTHUR BROWN, ESQ., M.A.

1. "The inherent difficulties of modern democratic government are so manifold and enormous that in large and complex modern societies it could neither last nor work if it were not aided by certain forces which are not exclusively associated with it but of which it greatly stimulates the energy" (*Maine*: "Popular Government"). Comment.

2. Discuss the extent to which it is possible to make use of exact definition in the classification of political institutions.

3. Discuss the influence of historical accident on constitutional development.

4. "A tendency to democracy does not mean a tendency towards liberty ...... to place the chief power in the most ignorant classes is to place it in the hands of those who naturally care least for political liberty .... in all ages and countries it is the upper and middle classes which have chiefly valued constitutional liberty, and these classes it is the work of democracy to dethrone" (*Lecky*). Comment.

5. "An English parliamentarian who observes the American House (of Representatives) at work is more impressed by the points of contrast (with the House of Commons) than by those of similarity. The life and spirit of the two bodies are wholly different" (*Bryce*). Comment.

SECOND HALF.

Examiner—BEPINBIHARI SEN, ESQ., M.A.

1. Distinguish between a Parliamentary and a Non-parliamentary executive, and point out the relative advantages and disadvantages of each by a reference to the English, the American and the German constitutions. Compare the position of the English king with that of the American president.

2. What are the uses of a Second Chamber? Compare the constitution and functions of the American Senate with those of the German Bundesrath and of the Senate of Republican Rome. What reforms do you suggest to make the English House of Lords an efficient Second Chamber?

3. Discuss the relative merits of a flexible and a rigid constitution. Explain the constitution and functions of the Supreme Court of the United States.

4. What are the leading characteristics of federal government ? Distinguish between an ancient and a modern federal state. Compare the American, the Swiss and the German systems of federal government, and state your reasons for and against a federation of the British Empire.

5. "Rousseau borrowed from Hobbes the true conception of sovereignty and from Locke the true conception of the ultimate seat and origin of authority." Fully expand and explain the statement.

ECONOMICS.

GROUP B.

COMPARATIVE STUDY OF SOCIAL INSTITUTIONS.

FIRST PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

All the questions carry equal marks.

FIRST HALF.

Examiner—P. ANSTEY, ESQ., M.A.

Full marks—50.

Not more than THREE *questions to be attempted in this half.*

1. In what precise sense are we entitled to speak of, and to study, societies as organisms ?
Discuss some general analogies between the physical and the social body.

2. Critically examine the theory that the origin of religious conceptions and practices is deducible from primitive man's belief in doubles and ghosts.

3. Explain and illustrate the nature and functions of the tabu.

4. "The history of political ideas begins with the fact that kinship in blood, as typified in the patriarchal family, is the sole possible ground of community in political functions."
Comment on this quotation.

5. What, in your opinion, is there of permanent value to the Sociologist in the fundamental ideas of Auguste Comte ?

SECOND HALF.

Examiner—A. BROWN, ESQ., M.A.

Full marks—50.

Not more than THREE *questions to be attempted in this half.*

1. Lecky maintains that "in the great conflicts between argument and persecution the latter has been continually triumphant." ["*The Rise and Influence of Rationalism in Europe.*"] There are some writers however [e.g. Leslie Stephen] who hold the contrary view, viz. that religious persecution has rarely if ever achieved its object.

Discuss these two views fully, and give your own opinion.

2. Discuss the importance of the belief in magic as a factor promoting the growth of civilisation.

3. " It would appear that the followers of Spencer generally come to identify evolution with progress." (*Keller.*)

Discuss carefully whether this was Spencer's own view.

4. " When we find a Society very virtuous or very vicious—when some particular virtue or vice occupies a peculiar prominence, or when important changes pass over the moral conceptions or standard of the people— we have to trace in these things simply the action of the circumstances that were dominant. The history of Roman ethics represents a steady and uniform current, guided by the general conditions of Society, and its progress may be marked by the successive ascendency of the Roman, the Greek and the Egyptian spirit." [*Lecky*: " History of European Morals."]

Comment.

5. Discuss the extent to which the telic element entered into the primitive organisation of Society.

ECONOMICS.

Group B.

Comparative Study of Social Institutions.

Second Paper.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

First Half.

Examiner—Radhakamal Mukerjee, Esq., M.A.

Full marks—50.

Answer any THREE.

1. Examine the chief contrasts between Western and Indian institutions of marriage. Classify the main types of exogamous and endogamous divisions which are found in India.

2. Give a brief account of the general principles of the system of Totemism. Give instances from the Indian Aboriginal tribes.

3. Indicate the steps in the gradual process of assimilation of the Aboriginal tribes into Hinduism. Give illustrations.

4. Criticise Risley's main conclusions as regards the relation of caste to race. How far can anthropometry be regarded as a test of race ?

5. Examine the significance of any *three* of the following :—

    (1) The ceremony of the Sraddha.
    (2) *Kulinism.*
    (3) *Sambandham.*
    (4) The worship of Shitala or Ola-bibi.
    (5) The Ten Incarnations myth.
    (6) *Melas* and processions.

SECOND HALF.

Examiner—R. N. GILCHRIST, ESQ., M.A.

Full marks—50.

THREE *questions to be attempted.*

The questions are of equal value.

1. Analyse, showing their comparative value, the various kinds of evidence which enable us to trace early types of social organisation.

2. What are the leading features of Animism ? Refer in your answer to the chief animistic tribes in India, describing some of their beliefs.

3. Write a short Essay on the social value of superstition.

4. What are the fundamental principles governing Poor Relief ? Show how the accepted principles of the West differ from the customary methods prevalent in Bengal.

5. Give a general description of the character and composition of the population of Calcutta. What light does it throw on some of the practical problems of Calcutta city life ?

ECONOMICS.

GROUP B.

INTERNATIONAL LAW.

FIRST PAPER.

Examiner—A. BROWN, ESQ., M.A., LL.B.

SIX *questions to be attempted.*

1. Discuss the influence of Roman Law upon the Formation of Modern International Law.

2. Contrast and compare the legal positions of the Suez and Panama Canals.

3. Write notes on the history and present position of the exterritorial rights of European States in independent countries of oriental civilisation.

4. Write notes on the legal status prior to the present war of *any three* of the following :—(*a*) Finland, (*b*) Kiao-chow, (*c*) Egypt, (*d*) Mongolia.

What changes (if any) de jure or de facto have since taken place ?

5. Show historically how certain countries came to occupy a privileged position as Great Powers. Discuss how far (if at all) this privileged position conflicts with the principle of the equality of all States n International Law.

6. Write historical notes on the treatment accorded to the Dardanelles in the nineteenth century.

7. Discuss fully the legal responsibility of the various governments established at present in different parts of Russia for the national debt incurred by undivided monarchical Russia.

8. Discuss the cases that have arisen since 1914 bearing upon the question of the privileges and immunities of diplomatic envoys and their staffs.

9. "The doctrine of servitudes as it at present stands in international law is in a very incoherent state." Comment.

10. Discuss carefully the extent to which the condition *rebus sic stantibus* attaches to treaties.

ECONOMICS.

GROUP B.

INTERNATIONAL LAW.

SECOND PAPER.

Examiner—S. C. CHAKRABARTI, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

SIX *questions to be attempted.*

1. "International law has come to an end. Its rules are now no more than so many well-meaning counsels of perfection, certain to be ignored when they thwart, as they often must, the interests of belligerents." Criticise.

2. Give an account of the variations of usage in respect to the need of formal declaration before beginning war. Why is a precise declaration of war regarded as desirable ?

3. Distinguish between Retorsions and Reprisals as measures of constraint short of war. Consider whether the following are legitimate forms of Reprisal: (i) sequestration of the public debts of the state; (ii) arrest of subjects of the offending state as hostages.

4. Trace clearly the steps by which the existing code of land warfare has been elaborated. Notice in particular the contributions of—
(a) Lieber; (b) The Brussels Conference, 1874; (c) The Hague Conference, 1899.

5. Define 'Commercial domicil.' How has this conception been employed in the determination of enemy character ?

6. The Rothersand, a merchant vessel, had been the property of a German company engaged in the trade of carrying molasses. On August 1, 1914, whilst it was on the high seas, on a voyage between Hamburg and London, it was alleged to have been sold, under a contract made by telegram, to an English company carrying on the same business. Flying the German flag it arrived at the British port of Gravesend on August 5. There it was seized as a prize, and a suit was brought for its detention.
Discuss the questions of international law involved in this case.

7. Explain carefully what is meant by the statement that 'the military occupant should act as a usufructuary.' Has practice conformed to this rule ?

8. Consider whether a belligerent may lawfully destroy enemy merchant vessels without taking them into a prize-court. Criticise the statement : " If the right of destruction were denied, German measures against the Commerce of England at present would be practically impossible."

9. What is the Right of Angary ? Give historical instances of the exercise of this right. How would you justify the recent seizure of Dutch vessels by the Allies ?

10. State the rules of International law regarding the employment of civil population by an army of occupation. How far have the belligerents adhered to these rules in the present war ?

11. Examine, with special reference to the incidents of the present war, whether a belligerent airship violates the neutrality of a state by flying over its territory.

Are Aeronauts engaged in aerial warfare lawful combatants ?

12. State and annotate *two* of the following cases :—

    (1) *Wolff* v. *Oxholm* (1817).
    (2) The case of the Elector of the Hesse-Cassel.
    (3) The Harmony (1800)·
    (4) The Chile (1914).
    (5) The Alfred Nobel (1915).

ECONOMICS.

ESSAY.

GROUPS A AND B.

EIGHTH PAPER.

Candidates are required to give their answers in their own words as far as practicable.

Indicate on the cover of the answer-book the subject of your essay by the use of the appropriate number, e.g. I, II.

Write an essay on any *one* of the following subjects :—

I.

Examiner—C. H. HAMILTON, ESQ., M.A.

Mercantilism.

II.

Examiner—P. C. GHOSH, M.A., B.SC.

" Credit is the vital air of modern commerce."

III.

Examiner—J. C. COYAJI, B.A., LL.B.

Railway development in India.

IV.

Examiner—DR. PRAMATHANATH BANERJEE, D.SC.

Influence of wars on the growth of Protection.

V.

Examiner—B. MUKHERJEE, ESQ., M.A.

Development of Responsible Government in India and its compatibility with the British parliamentary sovereignty.

VI.

Examiner—SIR ASUTOSH MUKHERJEE, KT.

Progress of mathematical economics during the Nineteenth Century.

VII.

Examiner—BEPINBEHARI SEN, M.A.

Democracy : its past, present and the hopes of the future.

VIII.

Examiner—P. MUKHERJEE, ESQ., M.A.

The ideals of world empire : ancient and modern.

IX.

Examiner—A. BROWN, ESQ., M.A.

Extradition.

X.

Examiner—RADHAKAMAL MUKHERJEE, ESQ., M.A.

The Social Problems of Indian City Life.

·M.A. & M.SC. EXAMINATIONS.

1918.

PURE MATHEMATICS.

FIRST PAPER.

Examiners—$\begin{cases} \text{S. C. GHOSH, ESQ., M.A.} \\ \text{H. P. BANERJEE, ESQ., M.SC.} \end{cases}$

*Candidates are required to give their answers in their own words
as far as practicable.*

Candidates are required to answer only SIX *questions, three from each group.*

All questions are of equal value.

GROUP A.

1. (*a*) Show that the number of *r* combinations of *n* letters, when each letter may be repeated any number of times up to *r*, is

$$\frac{n(n+1)(n+2)\ldots(n+r-1)}{1.2.3.4.\ldots r}.$$

(b) In an election under the cumulative system there are p candidates and q seats. In how many ways can an elector give his votes, supposing that he does not withhold any vote ?

2. (a) Prove that $\lim\limits_{x=\infty} \dfrac{f(x+1)}{f(x)} = \lim\limits_{x=\infty} \left\{ f(x) \right\}^{\frac{1}{x}}$, if $\lim\limits_{x=\infty} \dfrac{f(x+1)}{f(x)}$ be not indeterminate.

(b) Find the value of

$$\lim_{x=\infty} \sin x \, \cot \frac{a}{x} \, \log \left(1 + \tan \frac{a}{x} \right).$$

3. Show that the series

$$\sum_{n=1}^{\infty} \frac{(-1)^{n-1}}{n+z^2},$$

although *conditionally* convergent, is for all values of z *uniformly* convergent.

4. (a) Define the terms *hyperbolic sine* and *hyperbolic cosine*. Show their analogy to the circular functions, explaining the propriety of their nomenclature.

(b) Show that

$$\tan (x+iy) = \frac{\sin 2x + i \sinh 2y}{\cos 2x + \cosh 2y}.$$

5. Show that

$$\frac{1}{1 \cdot 2 \cdot 3 \cdot 4} + \frac{1}{5 \cdot 6 \cdot 7 \cdot 8} + \frac{1}{9 \cdot 10 \cdot 11 \cdot 12} + \ldots = \tfrac{1}{4} \log 2 - \frac{\pi}{24}.$$

GROUP B.

6. Give a rigorous and *complete* proof of the irrationality of π.

7. Prove rigorously the Exponential Theorem for a complex variable.

8. (a) Find the necessary and sufficient condition for the convergence of an Infinite Product.

(b) Show that

$$\prod_{n=2}^{\infty} \left\{ 1 - \left(1 - \frac{1}{n} \right)^{n} z^{n} \right\}$$

converges if $|z| > 1$.

9. (a) Discuss the nature of the difference between the identical and the symmetrical equality of spherical triangles.

(b) Compare the cases of equality of plane triangles with those of spherical triangles.

10. Find the radius of Hart's circle and determine the positions of the points of intersection of Hart's circle with the sides of the triangle.

PURE MATHEMATICS.

Second Paper.

$$Examiners—\begin{cases} \text{S. C. Basu, Esq., M.A.} \\ \text{I. Brahmachari, Esq., M.A.} \end{cases}$$

Candidates are required to give their answers in their own words as far as practicable.

Six *questions are to be attempted, three from each group.*

The questions are of equal value.

Group A.

1.   Explain what is meant by the special roots of the equation $x^n - 1 = 0$. Prove that when one special root of this equation is known, the others can be immediately found.

Find the special roots of $x^{12} - 1 = 0$.

2.   Enunciate and prove Fourier's theorem regarding the separation of the roots of equations with numerical coefficients; and from it deduce De Gua's rule for obtaining their imaginary roots.

3.   Prove that if the leading constituents of a symmetric determinant be all increased by the same quantity x, the equation in x, obtained by equating to zero the determinant so formed, has all its roots real.

4.   If U, V, W are three given functions of x of the degrees $m, n, m+n-1$, respectively, prove that an identical relation exists of the form

$$R W \equiv U \phi(x) + V \psi(x),$$

where $\phi(x)$ and $\psi(x)$ are functions to be determined, of the degrees $n-1$ and $m-1$, respectively, and R is the resultant of U and V.

5.   Prove that, if $a_1, a_2, \ldots a_n$ be the roots (all unequal) of $f(x)$ and the coefficient of x^n in $f(x)$ be 1,

$$\frac{a_1^{n+r-1}}{f'(a_1)} + \frac{a_2^{n+r-1}}{f'(a_2)} + \ldots + \frac{a_n^{n+r-1}}{f'(a_n)}$$

will be equal to the sum of the homogeneous products of r dimensions of powers of the n quantities $a_1, a_2, \ldots a_n$.

Group B.

1.   Prove that the exact number of linearly independent seminvariants of degree i, weight w, and extent not exceeding p, is

$$(w, i, p) - (w-1, i, p).$$

2.   Show that the covariant derived from the seminvariant C_0 is

$$x^{ip-2w} e^{\frac{y}{x} \cdot O} C_0.$$

If

$$\phi(a, b, c, d, e, \ldots)$$

is a seminvariant, then

$$\phi(o, a, 2b, 3c, \ldots)$$

is also a seminvariant.

3. Prove that the sextic covariant G_x of the quartic $\phi(x)$ may be written under the form

$$\{\phi(x)\}^2 \ \Sigma \frac{\phi'(a)}{(x-a)^2}.$$

4. If U be any quartic and H_x its Hessian covariant, show that the squares of the four linear factors of U are

$$(\rho_2-\rho_3)\sqrt{\overline{H_x-\rho_1 U}} + (\rho_3-\rho_1)\sqrt{\overline{H_x-\rho_2 U}} \pm (\rho_1-\rho_2)\sqrt{\overline{H_x-\rho_3 U}},$$

where ρ_1, ρ_2, ρ_3 are the roots of $4\rho^3 - I\rho + J = 0$.

5. Write a short note on seminvariants and their properties.

PURE MATHEMATICS.

THIRD PAPER.

Examiners— $\Big\{$ DR. SYAMADAS MUKHERJEE. M.A.. PH.D.
S. M. GANGULY. ESQ., M.SC.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only THREE *questions to be attempted from each group.*

All questions carry equal marks.

GROUP A.

1. Obtain the equation (Trilinear or Areal) of the nine-points circle of a triangle and shew that the radical axis of the nine-points circle and the circumcircle is the axis of homology of the given triangle and its pedal.

2. Prove that the locus of the centres of the rectangular hyperbolas which have contact of the third order with a given parabola is an equal parabola having the same axis and directrix.

3 Show how four points in a plane can be represented as (f, g, h), $(-f, g, h)$, $(f, -g, h,)$ and $(f, g, -h)$.
Show that the diagonal triangle of the quadrangle formed by these four points is self-polar for all conics drawn through them, and that the locus of the centres of these conics is a conic circumscribing the diagonal triangle.

4. Given any conic and a right line in its plane not cutting it, show that the conic can be projected into a circle, while the line is projected to infinity.

5. Shew that the Jacobian of the net of conics

$$lU + mV + nW = 0,$$

where U, V, W are any three conics. is the same as that of U, V, W, and that if the three conics pass through the same two points, the Jacobian consists of the common chord and a conic through the two common points.
Hence deduce that the Jacobian of three circles is a circle orthogonal to them all.

6 & 7. Write a short essay on *one* of the following subjects :—

    (i) Method of Reciprocal Polars.

    (ii) Confocal Conics.

    N.B.—The essay is equivalent to *two* questions.

GROUP B.

8. Show that a proper curve of the nth order cannot have more than $\frac{1}{2}(n-1)(n-2)$ double points.

Also prove that the first polar of any point passes through every double point on a curve, and that its tangent at that point and the line joining the double point with the pole form with the tangents to the original curve at the double point a *harmonic* pencil.

9. Establish the Plücker's formulae :—

(1) $m = n(n-1) - 2\delta - 3k,$

(2) $i = 3n(n-2) - 6\delta - 8k,$

and deduce

$$\tfrac{1}{2}n(n+3) - \delta - 2k = \tfrac{1}{2}m(m+3) - \tau - 2i.$$

10. Prove that if a curve of the third order pass through eight of the points of intersection of two curves of the third order, it passes through the ninth point of intersection.

To whom is this theorem due ?

Can you apply this to prove that the tangentials of the three points at which a conic has simple contact with a curve of the third order are in one right line ?

Deduce that the tangentials of three collinear points on a curve of the third order are collinear.

11. Shew that every non-singular cubic can be reduced to the canonic al form

$$x^3 + y^3 + z^3 + 6m\,xyz = 0$$

and that the reduction can be effected in four different ways.

Can you use this form to show that a non-singular cubic has three real points of inflexion and that they lie on the right line $x + y + z = 0$?

12. Define the *Cayleyan* of a cubic and show that the Cayleyan touches the nine inflexional tangents as well as the nine harmonic polars, and that these latter are cuspidal tangents to the Cayleyan.

13. Shew that through the four points of contact of any two bitangents of a quartic *five* conics can be described, each of which passes through the four points of contact of two other bitangents.

14. What is a *bicircular* quartic ?

Show that the envelope of a variable circle which cuts a fixed circle orthogonally and whose centre moves along a fixed conic is a bicircular quartic.

Prove that the variable circle has double contact with the quartic and that the chord of contact always passes through the centre of the fixed circle.

PURE MATHEMATICS.

FOURTH PAPER.

Examiners—$\begin{cases} \text{B. M. SEN, ESQ., M.Sc.} \\ \text{DR. HARIDAS BAGCHI, M.A., PH.D.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

Attempt only THREE *questions from each group.*

The questions are of equal value.

GROUP A.

1. Show how to put the equations of any right line in the forms

$$x = az + b, \quad \} $$
$$y = cz + d, \quad \}$$

and prove that the line will trace out a ruled surface, if the constants a, b, c, d be connected by three given relations.

Verify that the locus of the line

$$x = az + \phi(a),$$
$$y = a^2 z + \psi(a),$$

will reduce to a developable, when $\psi'(a) = 2a\phi'(a)$.

2. Prove that a quadric possesses, in general, two *distinct* systems of generators. Modify this theorem (if necessary) in the case of a cone. Can you prove that every ruled surface, which admits of two systems of generators, is necessarily a quadric ?

3. Discuss the nature of a plane section of a given conicoid, and derive conditions for a parabolic section.

Establish the following propositions:—

(i) A conicoid has, in general, a two-fold infinity of planes whose sections are parabolas.

(ii) A pair of conicoids has, in common, a one-fold infinity of planes of parabolic section.

(iii) Three given conicoids can have a common plane of parabolic section, when and only when they have a common tangent line at infinity.

4. Explain briefly the general principles of reciprocation. Prove that a quadric reciprocates into another quadric, and find the locus of the origin of reciprocation, in order that the transformed quadric may be a paraboloid. Hence or otherwise devise a method of reciprocating three given conicoids into paraboloids.

5. Indicate any general method of finding the envelope of a one-parameter family of planes.

Find the envelope of the plane $lx + my + nz = p$, subject to the conditions

$$l^2 + m^2 + n^2 = 0,$$
$$a^2 l^2 + b^2 m^2 + c^2 n^2 = p^2 ;$$

and apply your result or proceed otherwise to prove that the envelope of a system of confocal conicoids is a developable, whose edge of regression is a *null-line*.

GROUP B.

6   Establish Serret-Frenet formulæ, viz. :—

$$\frac{da}{ds}=\frac{b}{\rho}, \quad \frac{db}{ds}=\frac{c}{\sigma}-\frac{a}{\rho}, \quad \frac{dc}{ds}=-\frac{b}{\sigma}.$$

Use the third formula to shew that, if the binormals of a curve are parallel to one another, the curve must lie in a plane.

7   Adopting the usual notation, express the equation of the asymptotic lines of a surface in the form

$$\lfloor dp^2 + 2Mdp\, dq + Ndq^2 = 0.$$

Examine the singular solution, and *deduce immediately* that the parabolic curve must touch every asymptotic line of the surface.

8.   Obtain conditions that the parametric curves may be (i) null-lines; (ii) asymptotic lines.

For the surface given by

$$x = qf(p) + a_1q + b_1,$$
$$y = w \cdot qf(p) + a_2q + b_2,$$
$$z = w^2 \cdot qf(p) + a_3q + b_3,$$

(where w is an imaginary cube root of unity), prove that the sets of curves $p=$ const. and $q=$ const. are respectively asymptotic lines and null-lines.

9.   For a general surface, the edge of regression on the developable surface generated by the normals along a line of curvature is a geodesic on the corresponding sheet of the centro-surface.

Verify that the lines of curvature on the quadric

$$\frac{y^2}{a} + \frac{z^2}{c} = 4x$$

are the intersections by the confocal quadrics

$$\frac{y^2}{a-p} + \frac{z^2}{c-p} = 4(x-p).$$

10.   Define the geodesic curvature and torsion of a curve on a surface. Shew that the general solution of the equation $\Delta_1\phi=1$ determines a family of geodesic parallels cut orthogonally by a family of geodesics.

PURE MATHEMATICS.

FIFTH PAPER.

Examiners— $\begin{cases} \text{HON. MR. R. P. PARANJPYE. M.A.} \\ \text{M. GUPTA, ESQ.. M.SC.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIVE *questions are to be attempted, but not more than three from either part.*

PART I.

1. (*a*) Explain, with illustrative examples, what is meant by a   **20**
monotone sequence.
If the sequence whose n^{th} term is a_n is monotone, prove that the
same is true also of the sequence whose n^{th} term is

$$a_1 + a_2 + \ldots + a_n$$

(*b*) Draw a graph of the function y defined by the following equation :—

$$y = \underset{n \to \infty}{Lt} \frac{1}{1 + n \sin^2 \pi x}.$$

2. (*a*) When is a function $f(x)$ said to possess a differential coeffi-   **20**
cient at $x = a$?

A function $f(x)$ is defined in the following way :—

$$f(x) = x \sin \frac{1}{x}, \text{ when } x \neq 0,$$

$$\text{and} = 0 \quad , \text{ when } x = 0 ;$$

examine whether or not it possesses a differential coefficient at $x = 0$.

(*b*) If $f(x)$ has a derivative for all values of x in the interval
$(a, a + h)$, establish the following relation:

$$f(x + h) = f(x) + h f'(x + \theta h), \ (0 < \theta < 1) ;$$

shew that the limit when $h \to 0$ of the number θ, which occurs in the
above theorem, is $\frac{1}{2}$, provided $f''(x)$ is continuous.

3. State and prove Euler's Theorem on Homogeneous Functions   **20**
in the case of n independent variables.
Employ the above theorem to prove (or otherwise deduce) that if

$$V = ax^2 + 2bxy + cy^2,$$

$$\left(\frac{\partial V}{\partial x}\right)^2 \cdot \frac{\partial^2 V}{\partial y^2} - 2 \frac{\partial V}{\partial x} \cdot \frac{\partial V}{\partial y} \cdot \frac{\partial^2 V}{\partial x \partial y} + \left(\frac{\partial V}{\partial y}\right)^2 \frac{\partial^2 V}{\partial x^2} = 8 V (ac - b^2).$$

4. When are two proper curves of the mth and n^{th} degrees $(m > n)$ **20**
said to have the closest possible contact between them, and what
will the order of contact be in such a case ?

If the equation to a curve passing through the origin be

$$u_1 + u_2 + u_3 + \ldots + \ldots = 0,$$

where u_n is a homogeneous function of x, y of n dimensions, show that the general equation to all conics having the same curvature at the origin as the given curve is

$$u_1 + u_2 + (lx + my)\, u_1 = 0,$$

where l and m are two arbitrary constants.

5. Define the Jacobian of a system of n functions with respect 20 to n independent variables.

If
$$\frac{d(y_1,\, y_2,\, y_3)}{d(x_1,\, x_2,\, x_3)}$$

denotes the Jacobian of $y_1,\, y_2,\, y_3$ with respect to $x_1,\, x_2,\, x_3$, and

$$\frac{d(x_1,\, x_2,\, x_3)}{d(y_1,\, y_2,\, y_3)}$$

the Jacobian of $x_1,\, x_2,\, x_3$, with respect to $y_1,\, y_2,\, y_3$, prove that

$$\frac{d(y_1,\, y_2,\, y_3)}{d(x_1,\, x_2,\, x_3)} \times \frac{d(x_1,\, x_2,\, x_3)}{d(y_1,\, y_2,\, y_3)} = 1 ;$$

and deduce that

$$\frac{d(y_1,\, y_2,\, y_3)}{d(x_1,\, x_2,\, x_3)} = 4, \quad \text{where } y_1 = \frac{x_2 x_3}{x_1}, \quad y_2 = \frac{x_3 x_1}{x_2}, \quad y_3 = \frac{x_1 x_2}{x_3}.$$

6. Transform Laplace's Equation $\nabla^2 V = 0$ into orthogonal curvi- 20 linear coordinates ; and thence or otherwise obtain the transformation in terms of spherical polar co-ordinates $(r,\, \theta,\, \phi)$.

7. Write an essay on *one* of the following subjects :—   20
     (a) Bernoulli's numbers.
     (b) Gamma Functions.
     (c) Epi- and Hypo-cycloids.
     (d) Taylor's Theorem.
     (e) Green's Theorem.

PART II.

8. (a) If $f(x)$ and $\phi(x)$ are two integrable functions in the interval 20 $(a,\, b)$, of which $f(x)$ is continuous and $\phi(x)$ maintains the same sign in $(a,\, b)$, shew that

$$\int_a^b f(x)\phi(x)\,dx = f\{a + \theta(b-a)\} \int_a^b \phi(x)\,dx, \ (0 < \theta < 1):$$

how do you modify the theorem if nothing is known as regards the continuity of $f(x)$ in $(a,\, b)$?

(b) Prove under certain conditions (to be specified) that

$$\int_{x_0}^{\chi} f(x)\,dx = (\xi - a)\, f(\xi) \, \log \frac{\chi - a}{x_0 - a}$$

when ξ lies between x_0 and χ.

9.   (a) Evaluate, rigorously, *one* only of the following integrals :—   20

   i) $\displaystyle\int_0^\infty \frac{\cos mx}{1+x^2}\,dx,$

(ii) $\displaystyle\int_0^\infty \frac{x^{2m}}{1+x^{2n}}\,dx,$

where *m* and *n* are positive integers and $m \not> n$.

   (b) Prove that the integral

$$\int_0^\infty -a^x \frac{\sin x}{x}\,dx,$$

converges *uniformly* in any interval $(0 \leq a \leq h)$, where *h* is an arbitrary positive number as large as we please.

10   Shew that   20

$$\int_0^\infty e^{-x} x^{n-1}\,dx$$

cannot have a finite value when *n* is negative ; and establish Euler's Theorem :—

$$\Gamma\left(\frac{1}{n}\right)\Gamma\left(\frac{2}{n}\right)\ldots\Gamma\left(\frac{n-1}{n}\right) = \frac{(2\pi)^{\frac{n-1}{2}}}{n^{\frac{1}{2}}}$$

   11. (a) How do you define the double integral of a bounded   20
function $f(x,y)$ of two independent variables x and y, extended over a finite region ?

   (b) Transform

$$\iint_{(A)} dx\,dy$$

into polar co-ordinates, where the field of integration A is a rectangle two of whose adjacent sides coincide with the co-ordinate axes ; evaluate the transformed double integral in two different ways and thence shew that the results agree with the value of

$$\iint_{(A)} dx\,dy.$$

   12.   Establish Green's Theorem for plane, viz.,   20

$$\iint_{(A)} \left(\frac{\partial Q}{\partial x} - \frac{\partial P}{\partial y}\right) dx\,dy = \int_{(\Gamma)} \left(P\,dx + Q\,dy\right).$$

where the double integral is extended over any closed region A and the line integral along the length of the entire contour Γ bounding the closed region A.

If A and B are two points on the y-axis, calculate the curvilinear integral

$$\int \left[\{ \phi(y)e^x - my \} dx + \{ \phi'(y)e^x - m \} \, dy \right]$$

taken along the length of any path AMB which begins at A and ends at B and is such that the enclosed area $AMBA$ is of given magnitude S, m denoting a fixed constant and $\phi(y)$ as well as $\phi'(y)$ being continuous for all points inside and on the boundary of the region $AMBA$.

13.   Shew the integral calculus can be applied to the solution of   20 questions in mean value and probability.

Through P any point within an ellipsoid, a chord QPQ' is drawn parallel to a given semi-diameter ρ; shew that the mean value of $\phi(QP \cdot PQ')$ for all points P within the ellipsoid is

$$3 \int_0^{\frac{\pi}{2}} \phi(\rho^2 \cos^2\theta) \sin^2\theta \cos\theta \, d\theta.$$

14.   Give a rigorous demonstration of the following limit :—   20

$$\underset{n \to \infty}{Lt} \int^h f(x) \frac{\sin nx}{x} \, dx \to \frac{\pi}{2} f(+0),$$

where h is positive and different from zero, and $f(x)$ is a function satisfying Dirichlet's usual conditions in $(0, h)$;

Or,

Shew that the series

$$a_0 + \sum_{m=1}^{\infty} \left(a_m \cos mx + b_m \sin mx \right),$$

converges to the limit

$$\tfrac{1}{2}\{ f(x+0) + f(x-0) \}, \text{ for } -\pi < x < \pi,$$

and to the limit

$$\tfrac{1}{2}\{ f(-\pi+0) + f(\pi-0) \}, \text{ for } x = \pm\pi;$$

a_0, a_m, b_m being the usual Fourier Coefficients and $f(x)$ satisfying Dirichlet's usual conditions in $(-\pi, +\pi)$.

PURE MATHEMATICS.

Sixth Paper.

Examiners—$\left\{\begin{array}{l}\text{Dr. D. N. Mallik, B.A., Sc.D.}\\ \text{N. K. Majumdar, Esq., M.A.}\end{array}\right.$

Candidates are required to give their answers in their own words as far as practicable.

All questions are of equal value.

Candidates are permitted to attempt only THREE *questions from each part.*

First Part.

1. Reduce the equation

$$axy \left(\frac{dy}{dx}\right)^2 + \left(x^2 - ay^2 - b\right) \frac{dy}{dx} - xy = 0$$

to Clairaut's form, and hence solve the equation.

Or,

Solve the Riccati's equation

$$\frac{dy}{dx} = \cos x - y \sin x + y^2.$$

Solve completely

$$3x^3 \frac{d^3y}{dx^3} + 2x^2 \frac{d^2y}{dx^2} + x \frac{dy}{dx} - y = 3x^3 + x^2 + x.$$

3. Integrate

$$(y^2 + yz)dx + (zx + z^2)dy + (y^2 - xy)dz = 0,$$

showing that the condition of integrability subsists.

Or,

Verify that the left-hand side of the equation

$$(\sin x - x \cos x) \frac{d^2y}{dx^2} - x \sin x \frac{dy}{dx} + y \sin x = x$$

vanishes when $y = \sin x$; and obtain the primitive.

4. Find the first necessary condition to be satisfied by y in order that it may render

$$J = \int_{x}^{x_1} F(x, y, y') \, dx$$

an extremum.

Illustrate this by considering the case of the surface of minimum area generated by the revolution of a plane curve between two given points about a given line in its plane but not intersecting the curve.

5.   Prove **Sturm's** Oscillation-theorem.

If y_1 and y_2 are two particular solutions of the equation

$$\frac{d^2y}{dx^2} + P\frac{dy}{dx} + Qy = 0,$$

the roots of $y_1 = 0$ and $y_2 = 0$ separate each other so long as both of these solutions remain continuous.

Briefly explain the utility of this theorem in the calculus of variations.

Or,

Assuming the solution of Euler's differential equation

$$\frac{\partial F}{\partial y} - \frac{d}{dx}\frac{\partial F}{\partial y'} = 0,$$

deduce the solution of Jacobi's differential equation

$$\left(P - Q'\right)u - \frac{d}{dx}\left(Ru'\right) = 0.$$

⁴. SECOND PART.

6.   Discuss geometrically the nature of the primitive of a differential equation of the first order, the singular solution, the tac-locus. the nodal locus and the cuspidal locus.

The primitive differential equation

$$\left(2x^2 + 1\right)\left(\frac{dy}{dx}\right)^2 + \left(x^2 + 2xy + y^2 + 2\right)\frac{dy}{dx} + \left(2y^2 + 1\right) = 0$$

is $c^2 + c(x + y) + 1 - xy = 0.$

Verify this, and obtain the singular solution and identify the associated locii.

7.   Find the form of ϕ such that, if $x = \phi(z)$ be substituted in the equation

$$x^4\frac{d^2y}{dx^2} + 2x^3\frac{dy}{dx} + n^2y = 0,$$

it will become

$$\frac{d^2y}{dx^2} + n^2y = 0.$$

Hence obtain the solution of the former equation.

8.   (1) Integrate in series :

$$\frac{d^2y}{dx^2} + \frac{1}{x}\frac{dy}{dx} + \left(1 - \frac{n^2}{x^2}\right)y = 0.$$

(2) Prove that $\dfrac{d}{dx}\left(x^n J_n\right) = x^n J_{n-1}.$

9.   Integrate the equation

$$x^2p + y^2q = z^2,$$

and find the equation of the cone of the second degree which satisfies the equation and passes through the point $(1, 2, 3)$.

10.   Solve the equation

$$x^2\frac{\partial^2 z}{\partial x^2} - y^2\frac{\partial^2 z}{\partial y^2} = y\frac{\partial z}{\partial y} - x\frac{\partial z}{\partial x}.$$

PURE MATHEMATICS.

SEVENTH PAPER

THEORY OF FUNCTIONS.

FIRST PAPER.

Examiners— { DR. GANES PRASAD, D.SC
DR. SYAMADAS MUKHERJEE, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

Not more than THREE *questions out of each group to be attempted.*

All the questions carry equal marks.

GROUP I.

1. Shew that if a sequence be such that each element after some fixed element is greater than the preceding element and all the elements are less than some fixed number, the sequence is convergent.

If a be any real positive number less than unity shew that the limit of the sequence $\{a^n\}$ is zero.

2. Define a *closed* set and a *perfect* set.

Shew that the derivative of any given set is a closed set which is perfect if the given set be dense-in-itself.

3. Shew that if an infinite set of intervals in (a, b) is such that every point of (a, b) is an interior point of at least one interval (the end points a and b being each an end point of at least one interval), then a finite number of intervals can be selected out of the given set which has the same property as the given set.

4. Explain the term *enumerable* when referred to a set of points.

Prove that the set of Algebraic numbers is an enumerable one.

5. Shew that the n-dimensional continuum has the same power as the one-dimensional continuum.

GROUP II.

6. Define the differential coefficient of $f(x)$ at a given point in the domain of $f(x)$.

Prove that the differential coefficient of $f(x)$ is non-existent for every value of x.

if
$$f(x) = \sum_{n=0}^{\infty} \frac{\cos (13^n x)}{2^n}.$$

7. Define the *partial* differential coefficients of $f(x, y)$ with respect to x and y at a given point (a, b) in the domain of $f(x, y)$.

Explain in what sense, and determine under what conditions, we may write

$$df = dx \frac{\partial f}{\partial x} + dy \frac{\partial f}{\partial y}$$

where
$$\frac{\partial f}{\partial x} \text{ and } \frac{\partial f}{\partial y}$$

denote partial differential coefficients.

8. Give a description of a curve which is continuous and passes through each point of a square at least once.

9. Shew that, if $f(x)$ be continuous in the interval (a, b) and $F(x)$ denote the integral of $f(x)$, then at every point of (a, b), $F(x)$ possesses a differential coefficient which is equal to $f(x)$.

Shew that if $\phi(x)$ has at every point of (a, b) a differential coefficient $f(x)$ which is a continuous function of x, then

$$\phi(x) - \phi(a) = \int f(x)\, dx.$$

10. Explain under what conditions an improper integral of $f(x)$ exists in an interval (a, b) containing a point c of infinite discontinuity, and under what conditions a principal value of the integral of $f(x)$ in (a, b) exists.

Shew that an improper integral of $\dfrac{\tan x}{x}$ in the interval $(0, \pi)$ does not exist although a principal value exists.

11. If $f(x)$ be continuous in the interval (a, b), shew that

$$\int_a^b f(x)\, dx = (b-a) f\{a + \theta(b-a)\},\ 0 \leqq \theta \leqq 1,$$

and if $\phi(x)$ be a limited integrable function which has the same sign throughout (a, b), except where it may be zero, show that

$$\int_a^b f(x)\phi(x)\, dx = f\{a + \theta\ (b-a)\} \int^b \phi(x)\, dx,\ 0 \leqq \theta, \leqq 1.$$

PURE MATHEMATICS.

EIGHTH PAPER.

THEORY OF FUNCTIONS.

SECOND PAPER.

Examiner—H. P. BANERJEE, ESQ., M.SC.

The questions are of equal value.

Answer THREE *from each group.*

GROUP A.

1. Prove that

$$\left| z + \sqrt{z^2-c^2}\ \right| + \left|\ z^2 - \sqrt{z^2-c^2}\ \right| = \left|\ z+c\ \right| + \left|\ z-c\ \right|.$$

Hence show that if the relations between the z and w-planes be given by

$$z^2 + 2zw \cos \lambda + w^2 = 1,$$

and if z describes an ellipse whose foci are the branch-points in the z-plane, w describes an ellipse whose foci are the branch-points in the w-plane.

2. Prove that the mapping of a sphere upon the complex plane, and conversely, by means of stereographic projection, is conformal.

3. What is meant by the *singular points* of an analytic function ?

Show that the classification of analytic functions into rational and transcendental, is *also* possible, from a knowledge of the character of their singular points.

4. Show that

$$\int_0^{\infty} e^{-x^2 \cos 2a} \cos (x^2 \sin 2a) \, dx = \frac{\sqrt{\pi}}{2} \cos a.$$

Deduce the value of

$$\cos x^2 \, dx.$$

5. A rectangular strip of finite breadth and infinite length can be conformally represented on the area of a w-circle, centre the origin, and radius a, by means of the relation

$$\frac{w-1}{w+1} = a \imath e^{\imath Z}.$$

Group B.

1. Prove that if h is a positive constant and

$$(1 - 2h z + h^2)^{-\frac{1}{2}}$$

is expanded in the form

$$1 + h \, P_1(z) + h^2 P_2(z) + h^3 \, P_3(z) + \ldots,$$

where the P's are Legendre's polynomials, the series converges so long as z is in the interior of an ellipse whose foci are the points $z = 1$ and $z = -1$ and whose major axis is

$$\tfrac{1}{2} \left(h + \frac{1}{h} \right).$$

2. If an analytic function w of z be defined only for a region in the positive half of the z-plane and if continuous real values of w correspond to continuous real values of z, then w can be continued across the axis of real quantities.

3. Explain the use of *Riemann surface* in mapping multiple-valued functions.

Discuss the Riemann surface for

$$w = \sqrt{z - z_0} + \sqrt[3]{\frac{z}{z - z_1}}$$

4. If $o < a < 1$, show that

$$\frac{e^{az}}{e^z - 1} = \frac{1}{z} + \sum_{n=1}^{\infty} \frac{2z \cos 2na\pi - 4n\pi \sin 2na\pi}{z^2 + 4n^2\pi^2}$$

5. Show that the function

$$c_1 w + c_2 = \int^z \frac{dz}{z^{1-a} (z-1)^{1-\beta}},$$

determine a conformal representation of a rectilinear triangle (with angles a, β, γ) in the w-plane, on the z-plane.

PURE MATHEMATICS.

SEVENTH PAPER.

THEORY OF GROUPS.

FIRST PAPER.

Examiner—DR. SYAMADAS MUKHERJEE, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

All questions carry equal marks.

Candidates are permitted to attempt THREE *questions only from each half.*

FIRST HALF.

1. (i) If $b^{-1}ab=a^k$, show that

$$b^{-y}ab^{+y}=a^{k^y}.$$

(ii) If $a^{-1}b^{-1}ab=c$ and if c be permutable with a and b, show that $(ba)^t=b^t a^t c^{\frac{1}{2}t(t-1)}$.

2. Show that a given permutation is either always expressible as a product of an even number of transpositions or as a product of an odd number of transpositions.

Show that every positive permutation of n given letters $a_1, a_2, \ldots a_n$ can be expressed in terms of circular permutations of the form $(a_1 \, a_2 \, a_p)$.

3. If G be a group of order N, and H a subgroup of order n, then n is a factor of N.

Show that every subgroup of a cyclic group is cyclic, and that a cyclic group contains only one subgroup of given index.

4. If H be a normal subgroup of G, explain what group is represented by G/H.

If H is a normal subgroup of G, then to each subgroup A of G/H there corresponds a subgroup L of G, such that $A \equiv L/H$, and that if A is normal in G/H, then L is normal in G.

5. When is a permutation group said to be imprimitive ?

If a group G of order n can be expressed as a transitive permutation group of degree n in which the n symbols are divided into imprimitive sets of r symbols, show that G has a normal subgroup of order r. Is the converse true ?

SECOND HALF.

6. Show that the alternating permutation group A of degree m is simple unless $m=4$.

Show that the symmetric permutation group G of degree m can contain no normal subgroup except the alternating group A of degree m unless $m=4$.

7. Show that if H is any normal subgroup of a group G, the commutant of G/H is $\{H, \triangle\}/H$.

Show that if any normal subgroup H of a group G coincides with or contains the commutant $\triangle$ of G, then G/H is Abelian, and conversely.

8. Show that if p^a is the highest power of a prime p which divides the order n of a group G, then G contains at least one subgroup of order p^a.

Show that if every Sylow subgroup of a group G is normal in G, then G is the direct product of these Sylow subgroups.

9. Show that every group G of order p^a where p is prime contains self-conjugate elements.

Show that every subgroup H of order p^s in any group G of order p^a is contained normally in a subgroup of order p^{s+1}.

10. Explain (with examples in each case) when two groups are simply or multiply isomorphic.

Show that the simple isomorphisms of a group G with itself define an intransitive permutation group L. If G and L are both regarded as permutation groups and have orders m and n, show that $\{G, L\}$ is a transitive group of degree m and order mn containing G as a normal subgroup.

PURE MATHEMATICS.

Eighth Paper.*

Theory of Groups.

Second Paper.

Examiners— $\begin{cases} \text{Dr. C. E. Cullis, M.A., Ph.D.} \\ \text{N. K. Majumdar, Esq., M.A.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

All questions carry equal marks.

Candidates are permitted to attempt THREE *questions only from each half.*

First Half.

1. Prove Lagrange's theorem : If a rational integral function of the roots $x_1, x_2, \ldots x_n$ of an equation remains unaltered by all the substitutions which leave another rational integral function unaltered, then the first is a rational integral function of the second and the elementary symmetric functions.

Hence show that each of Δ and θ can be expressed as a rational integral function of the other,

where $\qquad \Delta \equiv (x_1 - x_2)(x_2 - x_3)(x_3 - x_1),$

and $\qquad \theta \equiv (x_1 + wx_2 + w^2x_3)^3,$

x_1, x_2, x_3 being the roots of a cubic equation.

2. If a function $\psi(x_1, x_2, \ldots x_n)$ belongs to a subgroup H of index v under G, find the necessary condition that the resolvent equation for ψ may be binomial.

Can the resolvent equation for the roots of the general cubic be binomial ? Show reasons.

49

3. Define a *series of composition*.

Show that a given group may have many different series of composition, but that in all of them the number of terms is the same and the successive factor-groups differ only in the order of their arrangement.

4. Define the group of an equation in a domain R according to the Galois Theory.

Show that the group possesses the following two properties.

(*a*) Every rational function of the roots which remains unaltered by all the substitutions of the group lies in R.

(*b*) Every rational function of the roots which equals a quantity in R remains unaltered by all the substitutions of the group.

5. Prove that if an equation is irreducible in R, its group for R is transitive ; if reducible, the group is intransitive.

Prove that the order of the group of the equation $x^4 + 1 = 0$ for the domain of rational numbers cannot be less than 4. Is the group transitive in the domain $(1, i)$? Give reasons.

SECOND HALF.

6. If $x_1, x_2, \ldots x_n$ are the roots of a rational integral equation in R whose group is G, find the group of the resolvent equation for the rational function $\psi(x_1, x_2, \ldots x_n)$ in R which belongs to a subgroup H of index v under G.

Find the relation between this group, G and H.

7. Define a solvable group.

Assuming that an equation which has a regular cyclic group of prime order p for a domain R containing its coefficients and an imaginary p^{th} root of unity is solvable by radicals in R, deduce the general theorem that an equation is solvable by radicals in a domain R containing its coefficients if and only if its group in R is solvable.

8. What is an *Abelian equation* ?

Show that the group G of an Abelian equation is a regular cyclic group, and conversely.

9. Define a *metacyclic group*.

Find an analytical representation of the metacyclic group of prime degree p.

10. Show that a regular *pentagon* can be constructed with ruler and compasses, and that it is equivalent to the algebraic solution of $x^5 - 1 = 0$. Give the corresponding constructions.

PURE MATHEMATICS.

Seventh Paper.

Finite Differences.

First Paper.

Examiner—S. C. Dhar, Esq., M.Sc.

*Candidates are required to give their answers in their own words
as far as practicable.*

Candidates are to attempt eight *questions, all of which carry equal marks.*

1. If $f(x)$ be any function of x with *continuous* and *finite* derivatives, prove that it can be expressed in the form

$$f(x) = f(x_0) + \frac{x-x_0}{h} \Delta f(x_0) + \ldots + \frac{(x-x_0)\ldots\ldots(x-x_0-\overline{n-1}h)}{n!\ h^n} \Delta^n f(x_0)$$

$$+ \frac{(x-x_0)\ldots\ldots(x-x_0-nh)}{(n+1)!} f^{n+1}(\xi),$$

where ξ is a point comprised between the min. and the max. of

$$x_0, x_0+nh, x$$

and where x_0 is the initial pt. and $\Delta x = h$.

2. What do you understand by *factorials* and *factorial terms* ?
Prove by any method

$$u_x{}^n = (-1)^{n+1} \left\{ \frac{\Delta o^n}{1!} a^{n-1} u_x - \frac{\Delta^2 o^n}{2!} a^{n-2} u_x u_{x+1} + \ldots \ldots \right.$$

$$\left. + (-1)^{n+1} \frac{\Delta^n o^n}{n!} u_x u_{x+1} \cdots u_{x+n-1} \right\},$$

where $\qquad\qquad u_x \equiv (ax+b).$

3. Prove Herschel's Theorem

$$f(e^x) = f(1) + \infty\, f(1+\Delta) \cdot o + \frac{x^2}{2!} f(1+\Delta) \cdot o^2 + \ldots \&c.$$

and deduce

(i) $f\{(1+\Delta)^m\}o^n = m^n f(1+\Delta) \cdot o^n.$

(ii) $\left\{ f(1+\Delta) - f\left(\dfrac{1}{1+\Delta}\right) \right\} o^{2n} = 0.$

4. Prove Stirling's Formula of Interpolation, viz.

$$u_n = u_0 + \frac{n^{(1)}}{1!} \mu\delta u_0 + \frac{n(n)^{(1)}}{2!} \delta^2 u_0 + \frac{(n+1)^{(3)}}{3!} \mu\delta^3 u_0 + \frac{n(n+1)^{(3)}}{4!} \delta^4 u_0$$

$$+ \frac{(n+2)^{(5)}}{5!} \mu\delta^5 u_0 + \ldots \&c.,$$

where $\qquad\qquad \mu\delta u_0,\ \delta^2 u_0,\ \mu\delta^3 u_0, \ldots$ etc.,

are the ordinary central differences of u_0 of first, second, third, ... etc. orders respectively.

5.   Compute the value of log sin 9°22′ from the following table :—

θ	log sin θ	θ	log sin θ
6	9·01923		
7	9·08589	10	9·23967
8	9·14356	11	9·28060
9	9·19433	12	9·31788

6.   Provo by any means Laplace's Formula for mechanical quadrature and show when it is useful in computation.

7.   Determine in what cases the function

$$\tan^{-1} \frac{1}{p + qx + rx^2}$$

s immediately integrable, and in such cases sum the series

$$\tan^{-1} \frac{1}{p + q + r} + \tan^{-1} \frac{1}{p + q \cdot 2 + r \cdot 2^2} + \tan^{-1} \frac{1}{p + q \cdot 3 + r \cdot 3^2} + \ldots \&\text{c.}$$

8.   Provo Montmort's Theorem regarding the summation of the power series $\Sigma u_n x^n$, viz.

$$\overset{n}{\underset{n=1}{\Sigma}} \ u_n x^n = \frac{u_1 x}{(1-x)} + \frac{\Delta u_1 \cdot x^2}{(1-x)^2} + \frac{\Delta^2 u_1 \cdot x^3}{(1-x)^3} + \ldots \&\text{c.}$$

9.   Find the sum of the infinite series

$$x + 4x^2 + 9x^3 + 16x^4 + \ldots \&\text{c.}$$

and of the series

$$\frac{1}{8 \cdot 18} + \frac{1}{10 \cdot 21} + \frac{1}{12 \cdot 24} + \frac{1}{14 \cdot 27} + \ldots \&\text{c.}$$

10.   What are *factorial coefficients* ?   Prove that

$$C^{n+1}_k = C^n_{k-1} + n.C^n_k$$

and show how to calculate the values of C^n_k for different values of n and k.   Give a table up to C^6_6 .

11.   Express $x^{(-n)}$ in an infinite series in negative powers of x.

12.   Discuss the convergence of

$$\Sigma e^{-1 - \frac{1}{2} - \cdots - \frac{1}{n}} \Big/ n^r .$$

13.   Explain the principles and advantages of the method of "central differences" and show how " central differences " may be derived from ordinary differences.

14. If
$$(1+x)^n = c_0 + c_1 x + c_2 x^2 + \ldots \ldots + c_n x^n,$$
show that
$$c_0 c_2 + c_1 c_3 + c_2 c_4 + \ldots + c_{n-2} c_n = \frac{2n!}{(n-2)!\ (n+2)!}$$
and that
$$\frac{c_0}{1} - \frac{c_1}{2} + \frac{c_2}{3} - \ldots + (-1)^n \frac{c_n}{n+1} = \frac{1}{n+1}.$$

PURE MATHEMATICS.

EIGHTH PAPER.

FINITE DIFFERENCES.

SECOND PAPER.

Examiner—N. K. MAJUMDAR, ESQ., M.A.

Answer THREE *from each half.*

FIRST HALF.

1. Solve :—

(1) $u_{x+1} u_x + (x+2) u_{x+1} + x u_x = -2 - 2x - x^2.$

(2) $u_x u_{x+1} + 5 u_x + 6 = 0.$

2. The equation
$$\left(\frac{\Delta y}{a-1}\right)^2 + a^{2x} \left(\frac{\Delta y}{a-1}\right) - a^{2x} y = 0$$
has $y = c\ a^x + c^2$ for a complete primitive. Deduce another complete primitive.

3. Write a short essay on the general theory of difference-equations of the first order, and their solutions.

4. Write a short note on the solution of the complete linear difference equation of the nth order with constant coefficients.

Solve :—
$$(E-2)^3 (E-1) u_x = x^2 . 2^x$$
$$Or,$$

Solve the equations :—
$$\begin{aligned} v_{x+1} - u_x &= (l-m) x, \\ w_{x+1} - v_x &= (m-n) x, \\ u_{x+1} - w_x &= (n-l) x. \end{aligned}$$

5. If $\pi \equiv x \dfrac{\Delta}{\Delta x}$, and $\rho = x E$, show that

(1) $f(\pi) \rho^m = f(m) \rho^m.$

(2) $\pi(\pi-1)(\pi-2) \ldots (\pi-n+1) u = x(x + \Delta x) \ldots (x + \overline{n-1} \Delta x) \left(\dfrac{\Delta}{\Delta x}\right)^n u.$

SECOND HALF.

6. Solve:—

(1) $u_{x+1, y+1} - au_{x+1, y} - bu_{x, y+1} + abu_x = c^{x+y}$

(2) $\Delta \dfrac{du_x}{dx} - \dfrac{du_x}{dx} - \Delta u_x + u_x = e^{nx}$.

7. Define the algebraical inverse of a function.

If $\psi x \equiv (x^2 - 1)^3$,

find all the values of the inverse of ψ. Is ψ^{-1} always convertible or commutative with ψ ?

8. What is a *derivative* function ? Prove that—

(1) If two functions are inverse to, or convertible with, one another, then their corresponding derivatives are inverse or convertible.

(2) The derivatives of a periodic function are periodic functions of the same order.

Or,

Find the condition of convertibility of ax^b, and express it in the standard form of such convertible cognates.

Deduce, with the help of derivative functions or otherwise, the nth successive function of ax^b; and find the condition that it may be a periodic function of the pth order.

9. Solve:—

(1) $\phi \left(\dfrac{1+x}{1-x} \right) - a \, \rho \, (x) = 0$

(2) $\phi (x) + \dfrac{1}{1-x^2} \phi \sqrt{1-x^2} = 1 + x^2$.

10. Find a curve such that the normal at any point is equal to the ordinate where the normal cuts the axis of x.

Or,

11. Solve:—

(1) $f(x) \cdot f(y) = f(x+y)$

(2) $f(x) + x^{2n} f \left(\dfrac{1}{x} \right) = x^n$.

PURE MATHEMATICS.

SEVENTH PAPER.

VECTOR ANALYSIS AND QUATERNIONS.

FIRST PAPER.

Examiners— $\begin{cases} \text{S. M. GANGULY, Esq., M.Sc.} \\ \text{S. C. GHOSH, Esq., M.A.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

Any SIX *questions carry full marks.*

1. Define a *Quaternion* and its *Conjugate*. Show that the product of two quaternions is commutative if, and only if, they are coplanar.

Prove that if p and q are any two quaternions,
$$pKq + qKp = 2S \cdot pKq = 2S \cdot qKp.$$

2. Establish the formula
$$V \cdot aV\beta\gamma = \gamma Sa\beta - \beta S\gamma a.$$

Given that $Va\beta\gamma\delta = 0$, prove that the four vectors are coplanar and show that the condition is equivalent to
$$U\frac{a}{\beta} = \pm U\frac{\delta}{\gamma}.$$

Interpret this result.

3. Find the vector of the point of intersection of the line $\rho = a + \beta t$ with the plane $\rho = \gamma + \delta\tau$, where t is an arbitrary scalar, and τ an arbitrary vector subject to the condition $Sa\tau = 0$.

The extremity of the vector ρ is projected from the extremity of the vector a into a point on the plane $S\lambda\rho + 1 = 0$. Prove that this point lies at the extremity of the vector
$$\frac{V\lambda Va\rho + (\rho - a)}{S\lambda(a - \rho)}.$$

4. Interpret $\rho = a^{-1}\beta a$

and show that $\rho = a\beta a^{-1} = a^{-1}(Sa\beta - Va\beta).$

What are the relative directions of a and β if
$$K\frac{\beta}{a} = -\frac{\beta}{a} ? \text{ and if } K\frac{\beta}{a} = \frac{\beta}{a} ?$$

5. Wherein consists the difference between the two equations
$$\tau^2\frac{\rho}{a} = 1 \text{ and } \left(\frac{\rho}{a}\right)^2 = -1 ?$$

What is the full interpretation of each, a being a given, and ρ an undetermined, vector ?

6. Show that the differential of a quaternion function of a quaternion is a linear and distributive function of the differential.

Prove that
$$dVUq = V\left(V\frac{dq}{q} \cdot Uq\right) = V \cdot Uq^{-1} V(dq \cdot q^{-1})$$

where q is any quaternion.

7. Prove that

$$da^x = dx\left(\log Ta \ . \ + \ \frac{\pi}{2}\, Ua\right)a^x$$

where a is a constant vector and x a variable scalar and that

$$da^r = xS\,\frac{da}{a}\ .\ a^x + V\,\frac{da}{a}\ .\ Va^x$$

where x is constant and a variable.

8. Define a *linear vector function* of a vector. Show that $Va\rho\beta$ is such a function.

Prove that if

$$\phi\rho = aSa\rho + \beta S\beta\rho + \gamma S\gamma\rho$$

where $,\beta,\ \gamma$ are any three vectors, then

$$-\phi^{-1}\rho S^2 a\beta\gamma = a_1 Sa_1\rho + \beta_1 S\beta_1\rho + \gamma_1 S\gamma_1\rho$$

where $a_1 = V\beta\gamma$, etc.

9. Show that the curve

$$\rho = a\cos x + \beta\sin x$$

represents an ellipse of which a and β are conjugate radii. If the ellipse is projected on a plane at right angles to the vector λ, the vectors a and β will project into the principal semi-axes of the projection provided

$$S\ .\ V\lambda a V\lambda\beta = 0.$$

10. Show that the equation of a cone whose cyclic planes are

$$Sa\rho + 1 = 0 \quad \text{and} \quad S\beta\rho + 1 = 0$$

can be written in the form

$$Sa\rho S\beta\rho + \rho^2 = 0.$$

Reduce the equation to the form $S\rho\phi\rho = 0$ where ϕ is a self-conjugate function.

11. Eliminate ρ from the equations

$$Sa\rho = a, \quad S\beta\rho = b, \quad S\gamma\rho = c, \quad S\delta\rho = d,$$

where $a,\ \beta,\ \gamma,\ \delta$ are vectors, and $a,\ b,\ c,\ d$ scalars.

12. Prove that the square of the operator

$$\nabla = i\,\frac{d}{dx}\ + j\,\frac{d}{dy} + k\,\frac{d}{dz}$$

is the negative of the operator of Laplace.

Show that

$$(1)\ \ \nabla T\rho = U\rho \ \text{ and } \ (2)\ \ \nabla U\rho = -\,\frac{2}{T\rho},$$

ρ being the vector of any point.

13. If P and Q are scalar functions of ρ, show that

$$\nabla\ .\ PQ = \nabla P\ .\ Q + \nabla Q\ .\ P$$

Prove that

$$\int\frac{V\rho\,d\rho}{T\rho^3} = -\int Sdv\nabla\ .\ \nabla T\rho - 1$$

where no infinities occur.

14. (1) Obtain the usual expressions for the velocity and acceleration of a moving point along the radius vector and perpendicular to the radius vector of its path.

(2) A particle describes an ellipse about the centre as a centre of force. Find the law of force.

PURE MATHEMATICS.

EIGHTH PAPER.

VECTOR ANALYSIS AND QUATERNIONS.

SECOND PAPER.

Examiner—DR. HARIDAS BAGCHI, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

SIX *questions carry full marks.*

1. Shew that the series of quaternions $q, q^2, q^3, \ldots$ are coaxal. q and r are two quaternions satisfying the relation

$$a_1 + b_1 q + c_1 q^2 + \ldots = a_2 + b_2 r + c_2 r^2 + \ldots ,$$

where

$$a_1, b_1, c_1, \ldots a_2, b_2, c_2, \ldots$$

are scalars.

Prove that q and r have the same axes.

2. Define a linear vector function, and enunciate its fundamental properties.

Prove that

$$\varphi(a) + \varphi(a + \beta) + \varphi(a + 2\beta) + \ldots .$$

to n terms

$$= \frac{n}{2} \cdot \varphi[2a + (n-1)\beta] ,$$

where a, β are certain vectors, and ϕ denotes a linear vector function.

3. Indicate briefly any general method of solving vector equations of the first degree.

Given that the two equations

$$a \, S\lambda\rho + \beta \, S\mu\rho + \gamma \, S\nu\rho = 0,$$

and

$$a^{-1} \, S\lambda\rho + \beta^{-1} \, S\mu\rho + \gamma^{-1} \, S\nu\rho = 0,$$

have the same solution, prove that, in general, the vectors a, β, γ are parallel.

4. Discuss the nature of the locus, represented by each of the following equations:—

(i) $S a\rho + S\beta\rho + S\gamma\rho = 0,$

(ii) $\dfrac{1}{S a\rho} + \dfrac{1}{S\beta\rho} + \dfrac{1}{S\gamma\rho} = 0.$

5. Explain the method of calculating the maximum or minimum values of a scalar function of a variable vector.

Shew that the scalar expression

$$(\rho - a)^2 + (\rho - \beta)^2 + (\rho - \gamma)^2$$

will attain its critical value, when

$$\rho = \frac{a + \beta + \gamma}{3}$$

Interpret the result geometrically.

6. Express the differential of $S \cdot \rho\phi\rho$ in the form $2 S \cdot \rho\phi \, d\rho$ (where ϕ is a given self-conjugate function). Hence or otherwise evaluate the integral

$$\int S \cdot (a \, S a\rho + \beta \, S\beta\rho + \gamma \, S\gamma\rho) d\rho,$$

and prove that its actual value is

$$\tfrac{1}{2}[(Sa\rho)^2 + (S\beta\rho)^2 + (S\gamma\rho)^2] + \text{ a scalar const.}$$

7. Obtain the equations of equilibrium of a rigid body in the usual forms

$$\Sigma\beta = 0,$$
$$\Sigma V a \beta = 0,$$

where $\beta_1, \beta_2, \ldots$ are the forces acting at the extremities of the vectors $a_1, a_2, \ldots$ respectively.

A body is under the action of the forces

$$\mu + \nu - 2\lambda, \ \nu + \lambda - 2\mu, \ \lambda + \mu - 2\nu,$$

whose points of application are the extremities of the vectors λ, μ, ν. Prove that there will be equilibrium.

8. Define a *linear homogeneous strain*, and verify that it converts planes into planes. Determine the linear strain which transforms the planes

$$Sa\rho = 1, \ S\beta\rho = 1, \ S\gamma\rho = 1$$

into

$$Sa'\rho = 1, \ S\beta'\rho = 1, \ S\gamma'\rho = 1$$

respectively.

9. If $\rho\phi$ denotes the vector joining the origin to a moving particle, prove that the acceleration at each instant is represented by the vector $\dfrac{d^2\rho}{dt^2}$, where the scalar t denotes time.

The position of a moving particle is given by

$$\rho = a \cos t + \beta \sin t + \gamma,$$

where a, β, γ are fixed unit vectors at right angles to each other. Prove that the acceleration is always perpendicular to the vector γ, and is of constant magnitude.

PURE MATHEMATICS.

Seventh Paper.

Projective Geometry.

First Paper.

Examiners— { S. C. Basu, Esq., M.A.
{ I. Brahmachari, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Of the following ten questions which carry equal marks, candidates are required to answer only six, *namely, three from each group.*

Group A.

1. (*a*) Distinguish between Projective or Modern Geometry and the Geometry of the Ancients, indicating shortly the distinction between *projective* and *metric* methods of proof. •

(*b*) Illustrate your answer by proving Pascal's Theorem in the two methods.

2. (*a*) Enunciate and explain the Principles of Duality and Continuity, pointing out the advantages of the application of those principles.

(*b*) Apply the Principle of Duality to prove the following proposition—

If two trihedral angles $a'\beta'\gamma'$ and $a''\beta''\gamma''$ are such that the edges $\beta'\gamma'$ and $\beta''\gamma''$, $\gamma'a'$ and $\gamma''a''$, $a'\beta'$ and $a''\beta''$ lie in three planes g_0, β_0, γ_0 which pass through the same straight line, then the straight lines $a'a''$, $\beta'\beta''$, $\gamma'\gamma''$ will lie in the same plane. •

3. When are two figures said to be in *perspective* and when in *plane perspective* ?

Shew that two triangles which are reciprocal with respect to a conic are in plane perspective.

4. Shew that if a variable polygon of an even number of sides move in such a way as to remain always inscribed in a given conic, while all its sides but one pass respectively through as many fixed points on a straight line, then the last side also will pass through a fixed point collinear with the others.

5. (*a*) Prove that a harmonic pencil is cut by any transversal whatever in a harmonic range, and conversely, the rays which project a harmonic range from any centre whatever, form a harmonic pencil.

(*b*) Shew also that every projection or section of a harmonic form is itself a harmonic form.

Group B.

6. (*a*) Shew that the anharmonic ratio of four collinear points is unaltered by any projection whatever.

(*b*) Shew that the anharmonic ratio of four points A', B', D', C' of which the third lies at infinity is $B'C' : A'C'$.

7. Prove Ceva's Theorem, namely,

If the straight lines connecting the three vertices of a triangle RSQ with any given point T meet the respectively opposite sides in R', S', Q', the segments which they determine on the sides will be connected by the relation

$$\frac{SR' \cdot QS' \cdot RQ'}{QR' \cdot RS' \cdot SQ'} = -1.$$

8. (a) Given five points A, B', C, A', B, on a conic, find the point of intersection of the curve with any given straight line drawn through one of those points A.

(b) Given three points A, B'. C on a hyperbola, and the directions of both asymptotes, find the second point of intersection of the curve with any given straight line drawn through one of those given points A.

9. Enunciate and prove the reciprocal of Desargue's theorem, relating to a pencil of conics, and apply the proposition to establish that if a hyperbola and its asymptotes be cut by a transversal, the segments intercepted by the curve and its asymptotes respectively have the same middle point.

10. Write a short historical note on the Theory of Parallels.

Give your own view, with reasons, as to the correctness or otherwise of the Euclidean, Lobachewskian and Ricmannian Theories of Parallels.

PURE MATHEMATICS.

Eighth Paper.

Projective Geometry.

Second Paper.

$$Examiners-\begin{cases} \text{S. C. Dhar, Esq., M.Sc.} \\ \text{S. M. Ganguly, Esq., M.Sc.} \end{cases}$$

Candidates are required to give their answers in their own words as far as practicable.

Six questions are to be attempted, three from each half.

First Half.

1. Prove that a projectivity connecting two co-basal rows can always be expressed as the resultant of two involutions.

2. Define a cast on a conic.

Give the rules for addition and multiplication of two distinct proper casts $ABCD_1$ and $ABCD_2$ on the same conic.

3. Apply Brianchon's theorem to prove that the orthocentre of any triangle circumscribed to a parabola lies on the directrix, and from it deduce that the directrices of a range of parabolas form a flat pencil.

4. If the three sides of a variable triangle MAA' rotate about three fixed collinear points P, S', s respectively, while two vertices A and A' move upon two fixed straight lines which intersect in O, then the third vertex M will describe a straight line which also passes through O.

Prove the theorem, and show its equivalence to Desargue's theorem upon perspective triangles.

5. 'Any transversal is cut in involution by a pencil of conics.'

Give the reciprocal of the above theorem and from it deduce the focal properties of conics and their confocals.

6. Write a short note on the introduction of complex elements in the geometry of position.

SECOND HALF.

7. Give Hilbert's definition of an angle and state his axiom for congruence of angles.

Prove, on the basis of Hilbert's axioms, that all right angles are congruent to one another.

8. What are the essential conditions which a system of axioms should fulfil in order that such a system may form the logical foundation of a geometry.

How does Hilbert establish the compatibility of his five groups of axioms ?

9. State Pascal's Theorem for the plane and show how Hilbert bases on it an algebra of segments and establishes the Theory of Proportion independently of the Archimedean axiom.

10. How does Hilbert define (i) two polygons of *equal area* and (ii) of *equal content* ?

How does Hilbert define " *Measure* of *Area* " of triangles ?

What do you understand by the transversal decomposition of a triangle ?

If a triangle $\triangle$ is decomposed by means of *arbitrary* straight lines into a finite number of triangles $\triangle_k$, prove that

$$M = \Sigma m_k,$$

where M is the measure of the area of the triangle and M_k that of the area $\triangle_k$.

11. What are the fundamental laws of a Desarguesian number system ? Show that such a system makes possible the construction of a geometry of space in which Hilbert's axioms I, II and III are all fulfilled.

12. What do you understand by an Archimedean number system ?

Prove that for such a system, the *Commutative* law of multiplication is a necessary consequence of the remaining laws of operation.

PURE MATHEMATICS.

SEVENTH PAPER.

THEORY OF NUMBERS.

FIRST PAPER.

Examiner—H. P. BANERJEE, ESQ., M.SC.

Answer THREE *from each group.*

GROUP A.

1. Prove that if $a+b+c+ \ldots \not> n$, then $\dfrac{n!}{a!\,b!\,c!\,..}$ is an integer.

Deduce that $\dfrac{mn!}{(m!)^n\,n!}$ is an integer.

2. If $d_1, d_2, d_3, \ldots$ denote the divisors of a number N, then $\phi(d_1) + \phi(d_2) + \phi(d_3) + \ldots = N$.

Show that

$$\phi(1)\frac{x}{1+x^2} - \phi(3)\frac{x^3}{1+x^6} + \phi(5)\frac{x^5}{1+x^{10}} - \ldots \text{ ad inf.} = \frac{x(1-x^2)}{(1+x^2)^2}.$$

3. If S denote the sum of the primitive roots of p, where $p-1 = a^\alpha b^\beta c^\gamma \ldots l^\lambda$, $a, b, c, \ldots l$ and p being different primes, prove that $S \equiv -1$ or $+1 \pmod{p}$ according as the number of prime factors is odd or even and none of the exponents is greater than 1.

4. The congruence $f(x) = ax^n + bx^{n-1} + \ldots + l \equiv 0 \pmod{p}$ cannot have more than n incongruent roots if p is a prime number and $a \not\equiv 0 \pmod{p}$. Show that the limitation to a prime modulus is essential for this theorem.

Solve completely the congruence $x^2 - Hx + 3 \equiv 0 \pmod{12}$.

5. Give a rigorous proof of Legendre's Law of Reciprocity. Investigate whether the congruence $x^2 + 120 \equiv 0 \pmod{2707}$ is possible.

Group B.

6. Every prime of the form $8n+1$ or $8n+3$ can be expressed in one and only one way as the sum of a square and double a square number. Establish this.

7. If $\begin{pmatrix} a & \beta \\ \gamma & \delta \end{pmatrix}$ is a proper automorph of (a, b, c), show how to determine the values of a, β, γ, δ.

Indicate how to obtain all the automorphs from the fundamental one.

8. What is meant by a *reduced* point ?

Prove that no two reduced points can be equivalent.

9. When two forms are both properly and improperly equivalent to each other, show that each of them is improperly equivalent to itself.

If (a, b, c) be improperly equivalent to itself, show that

$$(a, b, c) \sim (a, -b, c).$$

10. Prove that two properly equivalent forms must belong to the same period and that two reduced forms are not equivalent if they belong to different periods.

PURE MATHEMATICS.

Eighth Paper.

Theory of Numbers.

Second Paper.

Examiners— $\begin{cases} \text{Rai A. C. Bose, Bahadur, M.A.} \\ \text{M. Gupta, Esq., M.Sc.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer FOUR *questions from Part I and* TWO *from Part II.*

PART I.

1. If the greatest common divisor of the set of integers $a, b, c \ldots$ 5
is m, shew that it is always possible to determine another set $x, y, z \ldots$ such that

$$ax + by + cz + \ldots = m.$$

If the set of integers $p_1, p_2, \ldots p_n$ is relatively prime to a given   10
modulus m and $q_1, q_2, \ldots q_n$ another set such that the expressions

$$p_r q_s - p_s q_r \quad \begin{pmatrix} r = 1, 2, \ldots n \\ s = 1, 2, \ldots n \end{pmatrix}$$

are all divisible by m, shew that there exists one and only one class of numbers B (mod m) which satisfy the simultaneous congruences

$$p + B \equiv qt \pmod{m}; \quad t = 1, 2, \ldots n.$$

2. Define equivalence and obtain a general criterion for the   2+6
proper equivalence of two forms.
If $D = D'\sigma^2$, shew that the forms $(1, 0, -D)$, $(\sigma^2, b\sigma, b^2 - D')$ are   7
equivalent if and only if the equation

$$t^2 - D'u^2 = 1$$

possesses an integral solution (t, u) which satisfies the congruence

$$t + bu \equiv 0 \pmod{\sigma}.$$

3. Explain how Gauss's theory of periods of the roots of cycloto-   10
mic equations is made use of to facilitate the algebraic solution of
such equations.
Shew that Euclidean methods can be employed to construct regu-   5
lar polygons of $(2^n + 1)$ sides if $2^n + 1$ is a prime.

4. If g denotes a primitive root of $x^{p-1} - 1 \equiv 0 \pmod{p}$ and γ any   10
one of the complex roots of $x^p - 1 = 0$, p being a prime, obtain the
equation whose roots are

$$\sum_{\lambda=0}^{\frac{1}{2}(p-3)} \gamma^{g^{2\lambda}} \quad \text{and} \quad \sum_{\lambda=0}^{\frac{1}{2}(p-1)} \gamma^{g^{2\lambda+1}}$$

Work out, directly and completely, the case of $p=17$, given that 3   5
is a primitive root of 17.

5. If the expression   5

$$\sum_{s=0}^{n-1} e^{\frac{2\pi i h}{p} s^2}$$

is denoted by $\phi\,(h,\,p)$, where h is an integer and p a positive prime,
prove that

$$\phi(h,\,p)= \left(\frac{h}{p}\right)\phi(1,\,p),$$

and establish Gauss's theorem:—

If n is the product of the positive odd primes $a,\,b,\,c.\,\ldots$ no two   10
of which are equal, and m the number of those primes which are of
the form $4k+3$, then the number of the primes $a,\,b,\,c,\,\ldots$, of which

$$\frac{n}{a}\,,\ \frac{n}{b}\,,\ \frac{n}{c}\,,\,\cdots$$

respectively are non-residues, will be

       (i)   even, if $m\equiv0$ or 1 (mod 4),

and   (ii)   odd, if $m\equiv2$ or 3 (mod 4).

6. If an odd positive integer P of the form $4h+3$ involves no   13
square factor, and h denotes the number of properly primitive classes
for the determinant $D=-P$, prove that an expression for h is given
by

$$\sum_{m=1}^{\frac{1}{3}(P-1)} \left(\frac{m}{P}\right)$$

in which $\left(\dfrac{m}{P}\right)=0$, when m is not prime to P.

What conclusion do you come to from the above formula, relating   2
to the distribution of residues and non-residues of a given prime ?

7. If $p_1,\ p_2,\ p_3,\,\ldots$ denote different primes and m any integer,   10
obtain a formula for determining the number of integers which are not
greater than m and not divisible by any of the primes $p_1,\,p_2,\,p_3\ldots$

Employ your formula to determine the number of integers not   5
greater than 1000 and not divisible by any of the primes 2, 3, 5, 7.

PART II.

8.   If $(a,\,b,\,c)$ be a primitive form for which   10

$$dv\,(a,\,2b,\,c)=\sigma,$$

shew that it is always possible to choose two integers x and y prime
to each other such that

$$\frac{ax^2 + 2bxy + cy^2}{\sigma}$$

is prime to any arbitrarily pre-assigned integer m.

If $(a,\,b,\,c)$ has its determinant $D\equiv3$ (mod 4), shew that integers   4
prime to $2D$ and capable of primitive representation by $(a,\,b,\,c)$ are
either all quadratic residues or else all non-residues of any odd prime
factor of D.

Calculate the generic characters of (3, 1, 12) and examine whether   6
or not it possesses supplementary characters.

9.   If K, K', K'' denote three classes of the same determinant, shew   10
that the class into which they compound is independent of the order
in which the successive composition is performed, i.e. shew that

$$(KK')\ K''=(K'K'')\ K=(K''K)\ K'.$$

Prove the following :—
(i) Two opposite properly primitive classes compound into the   4
principal class ;
(ii) If S denotes the simplest class and K any one class of divisor   6
σ, there exists at least one properly primitive class H such that $SH=K$.

10.   Prove that a properly primitive ambiguous form is equivalent 4 + 8
to one or the other of the types,

(i) $(a,\ o,\ a')$,

(ii) $(2b,\ b,\ c)$;

and that for such a form of the type $(2b,\ b,\ c)$, the determinant D
must be $\equiv 3$ (mod 4) or $\equiv 0$ (mod 8).

Also shew that the number of properly primitive ambiguous classes,   8
when D is negative and of the form $4h+3$, is precisely half as great
as the number of assignable total characters.

11.   Determine the total number of possible genera that is *a priori* 2 + 8
assignable in the case of a given determinant D and shew that there
actually exist only two genera when D is the product of two primes
and of the form $4h+1$.

Hence or otherwise deduce that   10

$$\left(\frac{p}{q}\right) = -\left(\frac{q}{p}\right),$$

where both p and q are primes of the form $4h+3$.

MIXED MATHEMATICS.

First Paper.

Examiners— $\begin{cases} \text{S. P. Das, Esq., M.A.} \\ \text{Nikhilranjan Sen, Esq., M.A.} \end{cases}$

*Candidates are required to give their answers in their own words
as far as practicable.*

*Six questions to be attempted, three from the first half and three
from the second half.*

All questions are of equal value.

First Half.

1.   Supposing the earth to be of uniform density ρ and slightly
deformed from the spherical shape with $r=a+\epsilon s_n$ as the equation of the
free surface: show that the potential at any point within the spherical
mass is given by

$$V=\tfrac{2}{3}\pi\rho(3a^2-r^2) + \frac{3g\epsilon}{2n+1}\ \frac{r^n}{a^n}\ S_n,$$

where g is the acceleration due to gravity on the surface of the spherical
earth, S_n a spherical surface harmonic of the nth degree, and ϵ a small
quantity whose second and higher powers may be neglected.

2. Prove that the potential at an internal point of the solid homogeneous ellipsoid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$$

is given by

$$\frac{V}{\pi \rho abc} = \int_0^\infty \left(1 - \frac{x^2}{a^2 + \lambda} - \frac{y^2}{b^2 + \lambda} - \frac{z^2}{c^2 + \lambda}\right) \frac{d\lambda}{\{(a^2 + \lambda)(b^2 + \lambda)(c^2 + \lambda)\}^{\frac{1}{2}}}.$$

Show that the potentials of two confocal solid homogeneous ellipsoids at any point external to both are proportional to their masses.

3. Show that the laws of the 'inverse square' and of the 'direct distance' are the only laws of force for which the external attraction of every homogeneous spherical shell is the same as that of a particle of equal mass at the centre.

If a self-attracting shell of mass M bounded by concentric spheres of radii a and b be cut by a plane through the centre, prove that the pressure between the halves is

$$\frac{3}{16} M^2 \frac{a^2 + 2ab + 3b^2}{(a^2 + ab + b^2)^2}.$$

4. Prove the principle of virtual work assuming the six fundamental equations of statical equilibrium to be true. Explain the use and the significance of Lagrange's Indeterminate Multipliers in the application of the principle of virtual work to the equilibrium of bodies under Constraints. Use the principle of virtual work to solve the following problem :—

A bead rests on a smooth wire in the form of the circle $x^2 + y^2 = a^2$, being acted on by forces λx^n and μy^n parallel to the axes. Find the position of equilibrium. Discuss the case when n is unity.

5. In the case of the equilibrium of a heavy body resting on a fixed rough surface, prove that the condition for stability is given by the inequality

$$\frac{1}{h} > \frac{1}{\rho} + \frac{1}{\rho'},$$

where ρ and ρ' are the radii of curvatures of the bodies at the point of contact and h the height of the centre of gravity of the upper body above the point of contact.

A solid hemisphere rests on a plane inclined to the horizon at an angle a, and the plane is rough enough to prevent any sliding. Find the position of equilibrium, $\sin a$ being less than $\frac{3}{8}$, and show that it is stable.

Second Half.

1. (a) Two screws on a cylindroid are reciprocal if they are parallel to a pair of conjugate diameters of the pitch conic. Prove this.

(b) A wrench (R, Rp) is resolved into six wrenches about six given screws, every pair of which is reciprocal. If the component wrenches are

$$(R_1, R_1 p_1), (R_2, R_2 p_2), \ldots \ldots ,$$

prove that $\qquad R^2 p = \Sigma R_1^2 p_1.$

2. (a) A system of forces is given by its six components X, Y, Z, L, M, N referred to any rectangular axes with the origin O as the base of

reference. Show that whatever base is chosen and whatever the directions of the rectangular axes may be, the quantities

$$LX + MY + NZ \text{ and } X^2 + Y^2 + Z^2$$

are invariants. What would be the invariants, if the axes were oblique and the axes of the couples L, M, N coincided with the oblique axes ?

(b) Find the invariant I of three wrenches whose forces are P_1, P_2 and P_3, and couples K_1, K_2 and K_3.

3. (a) Write a brief note on either of the following subjects :—

(i) Conditions of astatic equilibrium of a system of coplanar forces acting at given points.

(ii) Conditions satisfied by the directions and magnitudes of four forces in equilibrium.

(b) Any number of forces act along generators of the same system of a hyperboloid whose axes are

$$a, b \text{ and } c\sqrt{-1}.$$

Show that the central axis is a generator of a system of concyclic hyperboloids whose equation referred to the principal axes of the given hyperboloid is

$$\left(\frac{bc}{a} - p\right) x^2 + \left(\frac{ca}{b} - p\right) y^2 - \left(\frac{ab}{c} + p\right) z^2 = \left(\frac{bc}{a} - p\right)\left(\frac{ca}{b} - p\right)\left(\frac{ab}{c} + p\right),$$

where p is the pitch of the system of forces.

4. (a) A string rests on a rough surface under the action of any forces, and every element borders on motion; find the conditions of equilibrium.

(b) A fine string of inconsiderable weight is wound round a right circular cylinder in the form of a helix, and is acted on by two forces F, F' at its extremities. Show that, when the string borders on motion,

$$\log \frac{F'}{F} = \pm \mu \frac{\cos^2 a}{a} s,$$

where s is the length of the string in contact with the cylinder, a the angle of the helix, and a the radius of the cylinder.

5. (a) Find the attraction of a uniform solid right circular cylinder at a point P on its axis.

(b) Prove that the attraction of a uniform elliptic disc at the focus is

$$\frac{2\pi m}{e} \left\{ 1 - \sqrt{1 - e^2} \right\},$$

where m is the surface density.

MIXED MATHEMATICS.

Second Paper.

$Examiners$—$\left\{\begin{array}{l}\text{C. V. Raman, Esq., M.A.}\\\text{K. Khastgir, Esq., M.Sc.}\end{array}\right.$

All the questions are of equal value.

Candidates should attempt not more than THREE *questions in the first half, and not more than* THREE *in the second half.*

First Half.

1. Obtain the components of acceleration of a point referred to a system of curvilinear orthogonal co-ordinates, and deduce the components in the case of three-dimensional polar co-ordinates

Prove that the meridian acceleration of a point moving on the surface of the anchor ring

$$x = (c + a \sin \theta) \cos \phi,$$
$$y = (c + a \sin \theta) \sin \phi,$$
$$z = a \cos \theta,$$

is $a \ddot{\theta} - (c + a \sin \theta) \cos \theta \cdot \dot{\phi}^2.$

2. A particle is constrained to slide on a curve moving in its own plane. Discuss its motion.

A fine string wound round a circle has a particle attached to its extremity, and the circle is constrained to turn in its own plane round its centre with a uniform angular velocity ω. The particle is initially in contact with the circle and has a velocity V normal to the circle. If ξ be the length of string unwound at time t, prove that

$$\xi^2 = a^2 \omega^2 t^2 + 2aVt.$$

3. One end B of a heavy uniform chain hangs over a small pulley A, and the other end is coiled up on a table at C. If B preponderate, determine the motion and tension at C.

A uniform string whose length is l and weight per unit length w, hangs over a small smooth pulley with its ends just in contact with a horizontal plane ; if the string be slightly displaced, shew that when one end has risen through a height h, the pressure of the string on the plane is

$$w \left(2l \log \frac{l}{l-h} - h \right)$$

and its resultant pressure on the pulley is

$$w\, l \cdot \frac{l - 2h}{l - h} \,.$$

4. A particle under gravity is projected from a given point in a given direction with a given velocity, and moves in a uniform medium whose resistance varies as the square of the velocity. Determine its motion.

In the foregoing, prove that the polar equation of the hodograph is

$$\frac{1}{r^2} = \cos^2\theta \left(\frac{1}{V^2} + \frac{1}{U^2} \sinh^{-1} \tan \theta \right) + \frac{\sin \theta}{U^2} \,,$$

where the origin is at the highest point, V is the horizontal velocity, U the terminal velocity, and the initial line is horizontal and θ is measured positively downwards.

5. Find the brachistochrone for a particle moving in a given field of force.

Prove that a parabola is a brachistochrone for a constant force from the focus.

Second Half.

6. Discuss the stability of a central orbit when the law of force is

$$(1)\ m\phi(r),\ \text{and}\ (2)\ \mu r^n$$

at distance r.

Two centres of force attracting inversely as the square of the distance are distant r, r' respectively from a particle moving under their influence; if θ, θ' be the angles r, r' make with the line joining the centres of force, then

$$r^2\, r'^2 \frac{d\theta}{dt} \cdot \frac{d\theta'}{dt} = a\left(\mu \cos\theta + \mu'\cos\theta' + c\right),$$

μ, μ' being the absolute intensities of, and a the distance between, the centres of force, and c an absolute constant.

7. Obtain the equations of motion of a particle moving on a smooth surface of revolution, the axis of which is vertical.

A heavy particle is projected horizontally along the inner surface of a smooth sphere, with a velocity due to a fall from the centre to the point of projection. Shew that the radius of curvature of the path when it is at an angular distance θ from the lowest point of the sphere is

$$a\left(1 + \frac{\sin^2 a \cos a}{4\cos^3 \theta}\right),$$

where a is the initial value of θ, and a is the radius of the sphere.

8. Find the equations of motion of a simple pendulum, taking the rotation of the earth into account.

Show that the vertical plane in which the pendulum oscillates turns round from West to East through North with the constant angular velocity $\omega \cos a$, where a is the co-latitude.

9. Establish the Lagrangian equations, for the motion of a connected system of particles.

From the Lagrangian equations, deduce the equations of motion of a particle in polar co-ordinates.

10. Investigate the small oscillations of a pendulum which is subject to resisting forces proportional to the square of the velocity.

Two particles of masses M, m are connected by a light rod of length l. The first mass is constrained to move along a fixed smooth horizontal wire, while the other is free to oscillate in the vertical plane under the action of gravity. Find the motion.

MIXED MATHEMATICS.

THIRD PAPER.

Examiners— { HON. MR. R. P. PARANJPYE, ESQ., M.A.
                NALINIMOHAN BOSE, ESQ., M.SC.

Candidates are required to give their answers in their own words
as far as practicable.

Only THREE *questions are to be attempted from* EACH *group.*

The questions are of equal value.

GROUP A.

1. Explain what is meant by the momental ellipsoid of a body at a point.

Find the locus of points at which the momental ellipsoid for a given body degenerates to a spheroid, and the points, if such exist, at which it becomes a sphere.

2. Explain D'Alembert's principle and deduce the equations of motion of a rigid body.

A uniform rod has one extremity fastened by a pivot to the centre of a wheel which rolls on a rough horizontal plane, the other extremity resting against a smooth vertical wall at right angles to the plane containing the wheel and the rod ; prove that the inclination θ of the rod to the vertical when it leaves the wall is given by the equation

$$9M \cos^3\theta + 6m \cos\theta - 4m \cos a = 0,$$

where M and m are the masses of the wheel and rod, and a the initial inclination of the rod to the vertical, the system being supposed to start from rest.

3. A heavy body is rotating about a horizontal axis ; find the reactions on the axis when the body is in any position.

A piece of wire is bent into the form of an isosceles triangle and revolves about an axis through its vertex perpendicular to its plane. Find the centre of oscillation and show that it will lie in the base when the triangle is equilateral.

4. A homogeneous sphere of radius a is placed on a rough horizontal plane and a horizontal blow is given to it, the direction of the blow intersecting the vertical diameter at a distance c below the centre. Investigate the motion fully showing that, under certain circumstances, it will pass back through its initial position, and find the time taken to reach that position.

5. Obtain Euler's geometrical equations in the case of a body moving about a point.

If a constant couple be applied about the axis of symmetry of a body supported at its centre of inertia, and initially rotating about an axis perpendicular to that of symmetry, determine the motion completely ; and show that the cone described in the body by the instantaneous axis has the equation

$$\tan^{-1}\frac{x}{y} = \frac{A-C}{A} \cdot \frac{\Omega^2 C}{2N} \cdot \frac{z^2}{x^2+y^2},$$

where N is the couple and Ω the initial angular velocity.

GROUP B.

6. Enunciate and prove Kelvin's and Bertrand's theorems on the *Vis Viva* produced when a body is acted on by impulses.

Two uniform rods AB, BC of masses m, m' lie on a smooth table, inclined to one another at an angle a; they are jointed at B, and the end A turns on a pivot fixed in the table. First show that, if a blow P be delivered at the middle of the rod AB and perpendicular thereto, the kinetic energy of the resulting motion is

$$\tfrac{1}{2}P^2 \ \{\tfrac{4}{3}m + 4m' - 3m' \cos^2 a\}.$$

And secondly, show that, if there be a smooth peg touching the middle of BC and on the proper side of it to give constraint, and if the same blow be struck, the kinetic energy is

$$\tfrac{1}{2}P^2 \ \{\tfrac{4}{3}m + 4m' - \tfrac{8}{3}m' \cos^2 a\}.$$

7. Obtain Lagrange's equations for finite forces.

Four equal rods of length a and mass m are freely jointed at their extremities forming a rhombus, one of whose diagonals is vertical; the ends of the horizontal diagonal are joined by an elastic string at its natural length and the system falls to a fixed horizontal plane; prove that if θ be the angle which any rod makes with the vertical at a time t after the impact

$$(1 + 3 \sin^2 r) \left(\frac{d\theta}{dt}\right)^2 = \frac{18gh}{a^2} \ \frac{\sin^2 a}{1 + 3 \sin^2 a} + \frac{\partial g}{a}(\cos a - \cos \theta)$$
$$- \frac{3\lambda}{2ma} \ \frac{(\sin \theta + \sin a)^2}{\sin a},$$

where h is the height fallen through, a the initial value of $\dot\theta$, and λ the modulus of the string.

8. Obtain the equations of motion of a system whose position is defined by the co-ordinates $q_1, q_2, \ldots \ldots q_n$, which are connected by a number of relations of the form

$$f(q_1, q_2, \ldots q_n) = 0.$$

If l, m, n be the direction-cosines with respect to fixed axes of a rod moving in any manner in space, and if V be the potential energy, prove that

$$\frac{1}{l} \left(I \frac{d^2 l}{dt^2} + \frac{\partial V}{\partial l} \right) = \frac{1}{m} \left(I \frac{d^2 m}{dt^2} + \frac{\partial V}{\partial m} \right) = \frac{1}{n} \left(I \frac{d^2 n}{dt^2} + \frac{\partial V}{\partial n} \right),$$

where I is the moment of inertia of the rod about an axis through its centre perpendicular to its length

9. A horizontal rod of mass m and length $2a$ hangs by two parallel strings each of length $2a$ attached to its ends; an angular velocity w being suddenly communicated to it about a vertical axis through its centre, show that the initial increase of tension of either string is equal to $\tfrac{1}{4} maw^2$.

If the initial disturbance be small, find the time of a complete oscillation.

10. Write an essay on *one* of the following subjects :—

(a) Impact of two rough bodies in two dimensions.

(b) Small oscillations and initial motion.

MIXED MATHEMATICS.

Fourth Paper.

Examiners— $\left\{ \begin{array}{l} \text{B. M. Sen, Esq., M.Sc.} \\ \text{A. C. Sengupta, Esq., M.A.} \end{array} \right.$

*Candidates are required to give their answers in their own words
as far as practicable.*

Candidates are permitted to attempt six *questions,* three *from each group.*

All the questions are of equal value.

Group A.

1. At every point in a fluid the line rate of variation of the intensity of pressure in any direction is equal to the component in this direction of the external force per unit of volume of the fluid.

In a spherical envelope is a mass of gravitating gas arranged in spherical strata, of which the pressure at any point is always k times the density at the point. Prove that the equation to determine the density ρ at a distance r from the centre is

$$\frac{d}{dr}\left(\frac{r^2}{\rho}\frac{d\rho}{dr}\right) = \cdot \frac{-4\pi\gamma}{k} \cdot \rho r^2,$$

where γ is the constant of gravitation.

2. A rigid spherical shell of radius a contains a mass M of gas in which the pressure is k times the density, and the gas is repelled from a fixed external point O (distant c from the centre) with a force per unit of mass equal to $k/$ (distance). Prove that the resultant pressure of the gas on the shell is

$$\frac{kM}{c} \cdot \frac{5c^2 - a^2}{5c^2 + a^2}.$$

3. Define *surface of floatation* and *surface of buoyancy*.

If a plane move so as to cut from a solid a constant volume, and if H be the centroid of the volume cut off, the tangent plane at H to the surface which is the locus of H is parallel to the cutting plane.

A parabolic lamina, bounded by a double ordinate perpendicular to the axis, floats vertex downwards in a liquid with its focus in the surface and its axis inclined at the angle

$$\tan^{-1}\frac{\sqrt{7}}{2}$$

to the vertical; prove that the density of the liquid is to that of the lamina as $216 : 11^{\frac{3}{2}}$, and that the length of the bounding ordinate is three times the latus rectum.

4. Find the condition of stability when a body, floating in a *heterogeneous* liquid, is wholly immersed.

Find the nature of the generating curve so that for the surface of revolution and for all depths of immersion in a *homogeneous* liquid the height of the metacentre above the lowest point shall be any assigned function of the coordinates of the section of floatation.

5. Determine the difference between the heights of two places by means of the barometer, applying as many corrections as you can.

If the pressure of the air varied as the $\left(1 + \dfrac{1}{m}\right)^{th}$ power of the density, shew that, neglecting variations of temperature and gravity, the height of the atmosphere would be equal to $(m+1)$ times the height of the homogeneous atmosphere.

GROUP B.

6. Define the Principal Tensions at any point of a flexible membrane. Prove that for a flexible inextensible surface

$$p = \frac{t}{r} + \frac{t'}{r'},$$

with the usual notation.

A vessel is constructed of thin flexible and inextensible material, in the shape of the surface formed by the revolution of a Catenary, of which c is the parameter, about its axis. If t, t' are the principal tensions at the distance x from the axis, prove that •

$$2t - t' : 2t = x/c : \sinh 2x/c,$$

the difference of pressures inside and outside being supposed constant.

7. Find the form of the surface of a liquid in a cylindrical tube.

A capillary tube in the form of a surface of revolution is partly immersed in a liquid with its axis vertical. Find the equation of the generating curve if the liquid is in equilibrium at whatever height it stands in the tube.

8. Prove that a catenoid is the only possible form of revolution of a film when the pressure is the same on both sides.

A soap-bubble is filled with a mass m of a gas whose pressure is $k\,x$ (its density) at the temperature considered. The radius of the bubble is a, when it is first placed in air. The barometer then rises, the temperature remaining unaltered. Shew that radius of the bubble increases or diminishes according as the tension of the film is greater or less than $\dfrac{9}{8}\dfrac{km}{\pi a^2}$.

9. Prove that an oblate spheroid is a possible form of surface of a mass of gravitating liquid rotating uniformly about its axis in a state of relative equilibrium

Two gravitating liquids which do not mix, and whose densities are ρ, σ ($\rho > \sigma$) are enclosed in a rigid spherical envelope, and the whole rotates in relative equilibrium with a small uniform angular velocity ω about a diameter of the sphere. Shew that a possible form of the common surface of the two liquids is an oblate spheroid of ellipticity $\frac{15}{16}\,\omega^2/\pi(\rho + \frac{3}{2}\sigma)$.

10. An attracting mass of which the surface is an equipotential surface is surrounded by fluid whose attraction on itself is neglected. Prove that the pressure at any point is less than the pressure at the surface by

$$\frac{1}{4\pi\mu M} \iiint \rho R^2\, dx\, dy\, dr\,.$$

where R is the resultant force, M the total attracting mass, μ the constant of attraction, and the integration is throughout the volume between the two surfaces of equipressure.

MIXED MATHEMATICS.

Fifth Paper.

Examiners— $\left\{ \begin{array}{l} \text{Bibhutibhusan Datta, Esq., M.Sc.} \\ \text{Dr. Ganesh Prasad, D.Sc.} \end{array} \right.$

*Candidates are required to give their answers in their own words
as far as practicable.*

N.B.—*Attempt only* THREE *questions from each of the
Groups* (A) *and* (B).

All the questions are of equal value.

Group A.

1. Enunciate and prove Green's theorem.
Deduce that the square of the velocity cannot be a *maximum* at a point in the interior of a fluid which is incompressible and which moves irrotationally.
2. In the case of the motion of a liquid in two dimensions, find the stream-function due to two equal sources and an equal sink midway between them.
In the region bounded by a fixed quadrantal arc and its radii, determine the motion due to a source, and an equal sink situated at the ends of one of the bounding radii.
3. Establish Lagrange's hydrodynamical equations and deduce Cauchy's symmetrical equations of the type

$$\frac{\xi}{\rho} = \frac{\xi_0}{\rho_0}\frac{\partial x}{\partial a} + \frac{\eta_0}{\rho_0}\frac{\partial x}{\partial b} + \frac{\zeta_0}{\rho_0}\frac{\partial x}{\partial c},$$

where ξ, η, ζ, ρ have their usual significance.
Hence, or otherwise, prove that the strength of a vortex is constant with regard to the time.
4. Investigate the general surface-condition for a fluid in motion.
An ellipsoidal envelope, containing an incompressible liquid, changes its form as well as its position so as to remain ellipsoidal and of constant volume : prove that the velocity potential is

$$-\tfrac{1}{2}\left(\frac{\dot a}{a}x^2 + \frac{\dot b}{b}y^2 + \frac{\dot c}{c}z^2 \right),$$

where a, b, c are the semi-axes of the ellipsoid at time t.
5. Show how to find the motion of two solid spheres in an infinite liquid along the line joining their centres.

Group B.

6. For a fluid in motion, investigate the equation of continuity and the Eulerian equations.
7. An impulsive pressure equal to x^3 is applied within an infinitely thin vacuous stratum of spherical form which interrupts the continuity of an infinite mass of liquid. Find the motion of the liquid.
8. Find the motion of an infinite liquid produced by the uniform motion of a solid ellipsoid through it, parallel to a principal axis.
9. Find the stream-function due to a thin circular vortex ring in an infinite liquid.

10. Assuming that the internal potential of a homogeneous ellipsoid of density ρ and semi-axes a, b, c is

$$\pi\rho abc \left\{ \psi + \frac{x^2}{a}\frac{\partial\psi}{\partial a} + \frac{y^2}{b}\frac{\partial\psi}{\partial b} + \frac{z^2}{c}\frac{\partial\psi}{\partial c} \right\}$$

where

$$\psi = \int_0^{\infty} \frac{d\lambda}{(a^2+\lambda)^{\frac{1}{2}}(b^2+\lambda)^{\frac{1}{2}}(c^2+\lambda)^{\frac{1}{2}}},$$

find the equations for determining the relations between the axes and the angular velocity about the least axis of Jacobi's ellipsoid.

Hence prove that this velocity depends only on the *shape* of the ellipsoid and not on its absolute size.

MIXED MATHEMATICS.

Sixth Paper.

Examiners— $\left\{ \begin{array}{l} \text{Dr. D. N. Mallik, B.A., Sc.D.} \\ \text{Dr. S. K. Banerjee, D.Sc.} \end{array} \right.$

Candidates are required to give their answers in their own words as far as practicable.

Only six *questions are to be attempted,* three *from each group.*

The questions are of equal value.

Group A.

1. Prove that, neglecting atmospheric influences, the sidereal time of rising of a star whose R.A. and decl. are a, δ at a place of latitude ϕ is

$$\pi + a - \cos^{-1}(\tan\phi\tan\delta).$$

Taking the horizontal refraction as $35'$ and the sun's semi-diameter as $16'$, and defining the beginning and end of daylight as the moments when the sun's upper limb appears on the horizon, show that the increase in the duration of daylight, taking account of the refraction and semi-diameter, varies from $6.^m8$ sec ϕ at the equinoxes to

$$6^m8 \{\sec(\phi+w)\sec(\phi-w)\}^{\frac{1}{2}}$$

at the solstices, where w is the obliquity of the ecliptic.

2. Show that the latitude ϕ can be determined by an observation of the altitude a of the pole star which at the time of observation has an hour angle h and a polar distance p and that the formula is approximately

$$\phi = a - p\cos h + \frac{1}{2}\sin 1'' p^2 \sin^2 h \tan a$$

3. On the assumption that the $(n+1)^{th}$ power of the index of refraction of the atmosphere varies inversely as the distance from the centre of the earth, prove that the atmospheric refraction R is given by

$$R = \frac{1}{n}\left\{ z - \sin^{-1}\left(\sin z/\mu_0^n\right) \right\}.$$

Prove that the effect of refraction is to deform the circular disk of the sun or moon approximately into an ellipse.

4. Show that the effect of precession and nutation upon the R.A. and decl. of the stars during an interval t is equivalent to that produced by rotating the celestial sphere (i.e., the sphere containing the stars but not the circles of reference), about a diameter passing through the point whose longitude is zero and latitude is

$$\tan^{-1}[(pt+\triangle L)\,\triangle w],$$

the angle of rotation being

$$\{(pt+\triangle L)^2+(\triangle w)^2\}^{\frac{1}{2}},$$

and its direction retrograde, where p is the constant of precession, and $\triangle L$, $\triangle w$ are the nutations in longitude and obliquity respectively.

Explain by how much the interval between two passages of a given meridian through the same star differs from a mean sidereal day on account of precession. If the colatitude of the star be less than that of the pole, show that this difference will vanish when the difference of longitudes of the pole and star is

$$\cos^{-1}[\tan\,(\text{colat. of star})/\tan\,(\text{colat. of pole})].$$

5. Prove that the equation of time is approximately

$$\frac{12}{\pi}\left\{\,2e\sin\left(L-\epsilon\right)-\tan^2\tfrac{1}{2}w\sin 2L\,\right\}\ \text{hours},$$

where L is the mean longitude of the sun, e the eccentricity, ϵ the longitude of the perigee, and w the obliquity of the ecliptic.

Prove that, neglecting the eccentricity, the greatest value of the equation of time occurs when

$$\tan L=\sqrt{\sec w}\ \text{ and }\ \tan a=\sqrt{\cos w},$$

where a is the R.A. of the sun.

GROUP B.

6. Show that the effect of aberration is to increase the longitude λ and latitude β of a star by

$$-k\sec\beta\cos(\odot-\lambda)\ \text{ and }\ -k\sin\beta\sin(\odot-\lambda),$$

respectively, where $\odot$ is the sun's longitude. Show that the distance between two stars (β, λ and β_0, λ_0) is not altered by aberration if the sun's longitude $\odot$ satisfies the equation

$$\cos\beta\sin(\odot-\lambda)+\cos\beta_0\sin(\odot-\lambda_0)=0.$$

7. If ζ be the real zenith distance of the moon and π_ϕ the horizontal parallax of the moon at latitude ϕ, prove that the parallactic displacement π_ζ of the moon is given by

$$\tan\pi_\zeta=\sin\pi_\phi\sin\zeta/(1-\sin\pi_\phi\cos\zeta).$$

Hence show that
$$\pi_\zeta=\sin\pi_\phi\sin\zeta\,\text{cosec}\,1''+\sin^2\pi_\phi\sin 2\zeta\,\text{cosec}\,2''+\sin^3\pi_\phi\sin 3\zeta\,\text{cosec}\,3''+\cdots$$

8. Show how the various phases of an eclipse of the moon may be investigated by means of a quadratic equation in time of the form

$$At^2+2Bt+C=D^2,$$

after fully explaining the meaning of the quantities A, B, C, D.

Prove that if a particular phase of an eclipse is to occur at a given conjunction, the distance x of the centre of the shadow when the moon is passing through the node must lie within the limit

$$x < D' \left(\dot{\theta}^2 - 2\dot{\theta}\dot{\phi}\cos i + \dot{\phi}^2 \right)^{\frac{1}{2}} / \dot{\phi}\sin i,$$

where D' is the distance between the centre of the moon and the centre of the shadow corresponding to the given phase, $\dot{\theta}$, $\dot{\phi}$, the angular velocities expressed in radians per hour of the sun and moon about the earth's centre and in the planes of their respective orbits, and i the inclination of the orbits.

9. Prove that at a place in latitude ϕ, the duration of twilight x can be obtained by solving the quadratic equation

$$4\cos^2\phi\,\cos^2\delta\,.\,t^2 + 4[\sin\phi\sin\delta\sin 18^\circ - \cos(\phi+\delta)\cos(\phi-\delta)]t + \sin^2 18^\circ = 0,$$

where t stands for $\sin 2\tfrac{1}{2}x$, and δ is the sun's declination.

Show that twilight is shortest when the sun's declination δ satisfies the equation

$$\sin\delta = -\tan 9^\circ \sin\phi.$$

10. Assuming that the orbits of the planets are exactly circular, show that two observations of each planet and the time interval between them would suffice to determine its orbit.

If the heliocentric longitudes of the earth and a planet be L and l respectively, and they revolve in circles in coplanar orbits with radii a and b respectively, prove that with a suitable choice of units of time and distance

$$\rho^2 \frac{d\lambda}{dt} = \left(\sqrt{a} - \sqrt{b} \right) \left\{ 1 - \frac{a+b-\sqrt{ab}}{\sqrt{ab}}\cos(L-l) \right\},$$

where λ, ρ are the geocentric longitude and distance of the planet.

Hence explain the direct and retrograde motions of a planet.

11. Briefly describe the transit instrument and its errors.

If the western pivot of a transit instrument be a'' higher and β'' more to the north than the eastern, a star is unaffected whose north polar distance is

$$\text{colat.} + \tan^{-1}(\tan a \operatorname{cosec} \beta).$$

MIXED MATHEMATICS.

FIRST PAPER.

ELASTICITY.

Examiner—MEGHNAD SAHA, ESQ., M.SC.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FOUR *questions from Group A, and* TWO *from Group B, are to be attempted.*

GROUP A.

1. Show that there are certain combinations of the components of   12
strain which are invariant with regard to an orthogonal transformation
of axes about a fixed point. Deduce the expression for the strain-
energy function from these invariants, supposing the medium to be
isotropic.

2. In an electro-static system, prove that the mechanical action   10
at any point is obtained by assuming the existence of certain stresses
in Äther.

If R be the electrical intensity at any point, deduce that across a   4
tube of force there is a pressure $\dfrac{R^2}{8\pi}$, and along the tubes of force

there are tensions of the same amount.

3. Define ' Modulus of Elasticity.'   12

Prove the following relations :—

$$E \text{ (Young's Modulus)} = \frac{\mu(3\lambda + 2\mu)}{\lambda + \mu},$$

$$K \text{ (Modulus of compression)} = \lambda + \frac{2}{3}\mu,$$

$$\sigma \text{ (Poisson's Ratio)} = \frac{\lambda}{2(\lambda + \mu)},$$

where λ and μ have the usual significance. Prove that the strain-
energy function is an essentially positive quantity.

Show that σ lies between $\frac{1}{2}$ and $\frac{1}{4}$.

4. Deduce, from the equations of elastic equilibrium written in   14
Cartesian coordinates, the following equations in polar coordinates :—

$$\nabla^2\dot{\triangle} = 0, \quad \nabla^2(r\omega\gamma) = 0, \quad \mu\nabla^2(r u\gamma) + (\lambda + \mu)r\frac{\partial\triangle}{\partial r} - 2\mu\triangle = 0$$

If the displacements are radial, and there be no body forces, prove

that $u_r = Ar + \dfrac{B}{r^2}.$

5. A spherical elastic ball of radius r is allowed to impinge nor-   16
mally on an infinite plane of perfectly rigid material with the velocity

r. If the plane be covered with lamp-black, prove that the ball will leave on the plane a circular patch of radius

$$a = A(mv^2)^{\frac{1}{5}} r^{\frac{1}{4}},$$

where A is a constant depending on the elastic constant of the ball.

6. A crystal has three planes of symmetry mutually at right angles.   16
Prove that the strain-energy function is of the form

$$2W = Ae^2_{xx} + Be^2_{yy} + Ce^2_{zz} + 2Fe_{yy}e_{zz} + 2Ge_{zz}e_{xx} + 2He_{xx}e_{yy} + Le^2_{yz}$$
$$+ Me^2_{zx} + Ne^2_{xy}.$$

The crystal is subjected to a normal tension perpendicular to the plane of x. Show that the Poisson ratios for the directions of y and z are respectively

$$\frac{CH - GF}{BC - F^2}, \quad \frac{BG - HF}{BC - F^2}.$$

GROUP B.

7. Prove that the system of values   20

$$u = \frac{a}{2} \frac{\partial^2 r}{\partial x \partial z}, \quad v = \frac{a}{2} \frac{\partial^2 r}{\partial y \partial z}, \quad w = \frac{1}{r} + \frac{a}{2} \frac{\partial^2 r}{\partial z^2}, \quad \text{where } a = -\frac{\lambda + \mu}{\lambda + 2\mu},$$

is a solution of the equations of equilibrium. Prove that the displacements are due to a force $4\pi\mu$ applied at the origin in the direction of the Z-axis.

8. If $L = X_x u + X_y v + X_z w, \quad M = Y_x u + Y_y v + Y_z w,$ 6
and $N = Z_x u + Z_y v + Z_z w,$

prove that (L, M, N) behave exactly like a vector quantity.

If $\overline{W}, \overline{T}$ denote the average values of the strain-energy function   18
and the kinetic energy over a closed unit volume, prove that

$$\overline{W} - \overline{T} = \frac{1}{2\tau} \iiint \int_{t=0}^{t=\tau} (X\gamma u + Y\gamma v + Z\gamma w)\, dS\, dt$$

$$+ \frac{1}{2\tau} \iiint \int_{t=0}^{t=\tau} \rho\, (Xu + Yv + Zw)\, d\Omega dt$$

$$- \iiint \left[\frac{\rho}{4} \frac{d}{dt} (u^2 + v^2 + w^2) \right]_{t=0}^{t=\tau} dx\, dy\, dz.$$

9. A rectangular plate whose faces are given by $(z = \pm h)$, is subjected   20
to the surface tractions

$$X_x = Eaz, \quad Y_y = Ea\sigma z,$$

where $\sigma =$ Poisson's ratio. Find out the elastic displacements, and the distorted form of the planes which were parallel to the face.

Show also that the strain-energy function is given by

$$\tfrac{1}{2}z^2\, Ea^2\, (1 - \sigma^2).$$

10.　Enunciate and prove Betti's reciprocal theorem.　　24

If
$$u_1 = \frac{1}{r} + \frac{a}{2}\frac{\partial^2 r}{\partial x^2}, \quad v_1 = \frac{a}{2}\frac{\partial^2 r}{\partial x \partial y}, \quad w_1 = \frac{a}{2}\frac{\partial^2 r}{\partial x \partial z}.$$

where
$$a = -\frac{\lambda + \mu}{\lambda + 2\mu},$$

prove from Betti's theorem that the x-components of displacement at any point due to the surface-tractions (X_ν, Y_ν, Z_ν) and body forces X, Y, Z are given by the equation

$$4\pi\mu u = \iiint \rho\,(Xu_1 + Yv_1 + Zw_1)\,d\Omega + \iint (X_\nu u_1 + Y_\nu v_1 + Z_\nu w_1)\,dS$$

$$- \iint [X_\nu^{(1)} u + Y_\nu^{(1)} v + Z_\nu^{(1)} w]\,dS,$$

where
$$X_\nu^{(1)}, \; Y_\nu^{(1)}, \; Z_\nu^{(1)}$$

are the surface tractions derived from the displacements $(u_1\,v_1\,w_1)$.

MIXED MATHEMATICS.

EIGHTH PAPER.

ELASTICITY.

SECOND PAPER.

Examiners— $\begin{cases} \text{Dr. C. E. Cullis, M.A., Ph.D.} \\ \text{Satyendranath Bose, Esq., M.Sc.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

Candidates are required to answer SIX *questions only,* THREE *from each half.*

FIRST HALF.

1.　A rod of length 'l' supported at both ends has a load W at a distance ξ from one end.　Find the approximate form of the strained central line.

If δ be the deflection of the point where the weight is attached, prove that the Young's modulus

$$E = \frac{W\xi^2(l-\xi)^2}{3l\delta I},$$

where I is the Moment of Inertia of the cross-section about a line perpendicular to the plane of bending.

2. Find out the displacement formula for torsion of a cylindrical rod of any cross-section in the form

$$u = -Tyz, \quad v = Tzx, \quad w = T\phi;$$

Find ' ϕ ' when the cross-section is bounded by two confocal ellipses. What is the corresponding hydrodynamical analogue of the problem?

3. Solve the problem of flexure when the cross-section is an ellipse.

4. Write down the equations of equilibrium of a thin rod bent under terminal forces and couples. Clearly bring out the analogies with the kinetic problem of the motion of a top. Write down the result which corresponds to the energy integral of the kinetic analogue.

5. Prove that the greatest height ' l ' of a heavy uniform vertical rod, whose lower end is built in and which remains unbent, is given by the equation,

$$1 - \frac{1}{3\cdot2} \frac{Wl^2}{B} + \frac{1}{3\cdot6\cdot2\cdot5} \frac{W^2l^4}{B^2} + \dots$$

$$+ (-1)^n \frac{1}{3\cdot6\dots3n.2\cdot5\dots(3n-1)} \frac{l^{2n}W^n}{B^n} + \dots = 0.$$

Second Half.

6. If ' ϕ ' satisfies the equation

$$\frac{\partial^2 \phi}{\partial t^2} = c^2 \nabla^2 \phi,$$

show that the mean value of ϕ, over any spherical surface of radius ' r ' drawn round a point P as centre, satisfies the equation

$$\frac{\partial^2}{\partial t^2} (r\bar{\phi}) = \frac{c^2\partial^2}{\partial r^2} (r\bar{\phi}).$$

Hence deduce Poisson's solution of the original equation, viz.

$$\phi = t\bar{\dot{\phi}}_0 + \frac{\partial}{\partial t} (t\,\bar{\phi}_0)$$

and show that the equation represents a wave travelling with the velocity ' c.'

7. In a homogeneous medium of density ρ in which the strain-energy function W is given in the form

$$W = 2\,(Lw_x^2 + Mw_y^2 + Nw_z^2),$$

show that the wave surface is the Wave-Surface of Fresnel

$$\frac{Lx^2}{\rho r^2 - L} + \frac{My^2}{\rho r^2 - M} + \frac{Nz^2}{\rho r^2 - N} = 0.$$

8. In the case of purely radial vibration of a sphere, complete up to the centre, prove the frequency equation

$$\frac{\tan ha}{ha} = \frac{1}{1 - \frac{1}{4}k^2a^2}$$

where

$$h^2 = \frac{\rho p^2}{\lambda + 2\mu}, \quad k^2 = \frac{\rho p^2}{\mu}$$

p being the frequency and λ and μ the usual elastic constants.

51

9. In the extensional vibration of a rod, prove that

$$\frac{\partial^2 w}{\partial t^2} - \sigma^2 \kappa^2 \frac{\partial^4 w}{\partial s^2 \partial t^2} = \frac{E}{\rho} \frac{\partial^2 w}{\partial s^2}$$

where E is the Young's modulus, σ Poisson's ratio, and ρ the density of the material. Hence prove that the velocity of wave-propagation of the type

$$w = A e^{i(\gamma z + pt)}$$

is

$$v = \sqrt{\frac{E}{\rho}} (1 - \tfrac{1}{2}\sigma^2 \gamma^2 \kappa^2).$$

10. Assuming that the strain-energy function of a bent plate is

$$\frac{D}{2} \left[\left(\frac{1}{R_1} + \frac{1}{R_2} \right)^2 - \frac{2(1-\sigma)}{R_1 R_2} \right]$$

per unit area, where R_1 and R_2 are the principal curvatures of the neutral plane, find the equation of motion and the boundary conditions of a Vibrating plate.

MIXED MATHEMATICS.

SEVENTH PAPER.

HIGHER PARTS OF SPHERICAL ASTRONOMY.

FIRST PAPER.

Examiner—DR. D. N. MALLIK, B.A., SC.D.

Candidates are required to give their answers in their own words as far as practicable.

Only six questions are to be attempted, THREE from each group.

The questions are of equal value.

GROUP A.

1. Explain how you would find the mean time at which moon culminates at a given place on a given day and its R.A. and decl. at the moment of culmination.

Assuming $\theta = nt + 2e \sin nt$, where θ is the angular displacement of the moon in its orbit which is taken to coincide with the ecliptic, show that

$$a = a_0 + (a_0 - T_0) \frac{1}{1 - a'},$$

where

$$a' = n(1 + 2e \cos nt) \cos \omega \sec^2 \delta,$$

$$a = \text{the required R.A.}$$

a_0 being the R.A. at the local sidereal time T_0, it being understood that a_0 is a suitably approximate value of a and that t is expressed in sidereal seconds.

2. Explain the construction of a map on Mercator's system. If λ, β be the longitude and latitude of a point on the sphere, prove that the coordinates of a point on the map on this system are given by

$$x = h'\lambda, \quad y = h' \log_e \left(\frac{\pi}{4} + \frac{\beta}{2} \right).$$

Show also that the scale in Mercator's projection is expressed by h' sec β/a and that the equation of a trace on a Mercator's chart of a great circle will always be of the form

$$2 \sin \left(\frac{x}{a} + c \right) = 2k \sinh y/a,$$

where $2\pi a$ is the length on the map of the equatorial circumference, and c, k are constants defining the great circle.

3. Two stars whose R.A. and decl. are (a, δ) and (a', δ') respectively are observed to transit over the same vertical circle the azimuth of which is unknown in the sidereal times t, t'. Prove that the azimuth A as well as the latitude ϕ of the place can be determined by means of the equations

$$\tan A = \tan \left[\tfrac{1}{2}(t' + t - a' - a) - M \right] \operatorname{cosec} \phi,$$

$$\tan \phi = \tan \delta \, \frac{\sin \left[\tfrac{1}{2}(t' + t - a' - a) - M \right]}{\sin \left[\tfrac{1}{2}(t' - t - a' + a) - M \right]},$$

$$\tan M = \tan \tfrac{1}{2}(t' - t - a' + a) \sin (\delta' + \delta) \operatorname{cosec} (\delta' - \delta).$$

4. Find the geocentric parallax of a star in zenith distance and azimuth when the earth is regarded as a spheroid.

Prove that

$$A' - A = \frac{m \sin A}{\sin 1''} + \frac{m^2 \sin 2A}{\sin 2''} + \frac{m^2 \sin 3A}{\sin 3''} + \text{etc.},$$

where

$$m = \sin \pi_\phi \sin (\phi - \phi') \operatorname{cosec} z,$$

A', A the apparent and true azimuths, $\phi - \phi'$ the reduction of the latitude, and z the true zenith distance.

Hence show that if the third and higher powers of the eccentricity of the earth regarded as a spheroid be neglected, parallax diminishes the moon's azimuth by

$$\tfrac{1}{2} e^2 \sin 2\phi \sin \pi_\phi \sin a \operatorname{cosec} z.$$

5. Explain as fully as you can the method of determining longitudes by moon culminations.

GROUP B.

6. Give as complete an account as you can of the phenomena of precession and nutation from a kinematical point of view; explaining how luni-solar precession and nutation arise, and indicating how planetary precession is taken account of.

k is the angular velocity of the pole of the equator round the pole of the ecliptic, L is the longitude of the instantaneous axis of rotation of the ecliptic, and η its angular velocity. Show that these changes in the planes of reference produce annual rates of change

$$m + n \sin a \tan \delta \text{ and } n \cos a$$

in a, δ, the R.A. and decl. of a star, where

$$m = k \cos w - \eta \sin L \operatorname{cosec} w,$$

and

$$n = k \sin w,$$

w being the inclination of the equator to the ecliptic.

7. Obtain the differential equation of refraction

$$dR = \frac{1}{\mu} \frac{a\mu_0 \sin z}{(r^2\mu^2 - a^2\mu_0^2 \sin^2 z)^{\frac{1}{2}}} \, d\mu.$$

Assuming that $\dfrac{r}{a} = 1 + s$, where s is a small quantity, prove that an approximate integral of this differential equation can be obtained in the form

$$\sin^{-1}(\mu_0 \sin z) - z - cP \sin z \sec^3 z,$$

where c is a constant and $P =$ the pressure of the atmosphere.

8. Show how to determine the local time at any place by observations of the equal altitudes of the sun before and after noon.

If the sidereal clock times when the sun arrives at equal altitudes on each side of the meridian are u' and u, and if the change of declination δ of the sun in the interval be $d\delta$, and the R.A. of the sun at culmination is a, show that the correction to be applied to clock time to obtain the true sidereal time is

$$a - \tfrac{1}{2}(u' + u) - \tfrac{1}{2}\left(\frac{\tan \delta}{\tan \frac{1}{2}(u' - u)} - \frac{\tan \phi}{\sin \frac{1}{2}(u' - u)} \right) d\delta.$$

9. Determine the effects of aberration on the R.A. and decl. of a star, taking account of the eccentricity of the earth's orbit.

Show that the constant of aberration is

$$2\pi a \, \mu T (1 - e^2)^{\frac{1}{2}} \sin 1'',$$

where a, T, e are the mean distance, the periodic time, and the eccentricity of the earth's orbit, and μ the velocity of light.

10. Prove that

$$m = v + 2 \sum_1^\infty (-1)^k \frac{\tan^k \frac{1}{2}\phi}{k} (1 + k \cos \phi) \sin kv,$$

where m is the mean anomaly and v the true anomaly and the eccentricity $e = \sin \phi$.

Show that

$$v = m + (2e) \sin m + \tfrac{5}{4} e^2 \sin 2m + \ldots$$

when e^3 and higher powers of e are neglected.

MIXED MATHEMATICS.

EIGHTH PAPER.

HIGHER PARTS OF SPHERICAL ASTRONOMY.

SECOND PAPER.

Examiner—DR. S. K. BANERJEE, D.Sc.

Candidates are required to give their answers in their own words as far as practicable.

Only SIX *questions are to be attempted,* THREE *from each group.*

The questions are of equal value.

GROUP A.

1. Explain why the arithmetic mean of a series of measurements of a quantity is taken to be the most probable value of that quantity.

Assuming this to be the case, show that the probability that the error shall be between x and $x + \delta x$ is given by

$$\frac{h}{\sqrt{\pi}} e^{-h^2 x^2} dx,$$

where h is a constant which you are to specify.

If a_1, a_2, ... be the measured values of successive quantities whose sum should be constant, w_1, w_2, ... are the weights of these measures, explain how the most probable values of the quantities have to be determined.

2. Show that observations of the altitudes of two known stars at a known Greenwich time are sufficient to determine the latitude and longitude of the observer. Show how from these observations the position of the observer may be found graphically on a terrestrial globe.

Prove that if $\triangle h$, $\triangle h'$ be the errors in the observed altitudes, the errors in latitude and longitude are

$$\operatorname{cosec}(A'-A)\,[-\sin A' \triangle h + \sin A \triangle h'],$$

$$\sec \phi \operatorname{cosec}(A'-A)\,[\cos A' \triangle h - \cos A \triangle h'],$$

respectively, in which A and A' denote the azimuths of the two stars and ϕ the latitude of the place.

3. Prove that if t is the time occupied by a planet in moving from the position indicated by the radius vector r to the position indicated by the radius vector r', and if k is the chord between the two positions, then

$$\frac{2\pi t}{P} = (\eta - \sin \eta) - (\eta' - \sin \eta'),$$

where

$$\sin \tfrac{1}{2}\eta = \tfrac{1}{2}\sqrt{\left(\frac{r+r'+k}{a}\right)}, \ \sin \tfrac{1}{2}\eta' = \tfrac{1}{2}\left(\frac{r+r'-k}{a}\right),$$

and P is the periodic time of the planet.

Show that the time spent by a comet within the earth's orbit is $\sqrt{2}\,(1-m)^{\frac{1}{2}}\,(1+2m)/3\pi$ parts of a year, where m is the perihelion distance of the comet, the unit being the earth's heliocentric distance regarded as *constant*. The orbit of the comet is presumed to be parabolic, and in the plane of the ecliptic.

4. Describe as fully as you can Halley's method of determining the sun's distance by the transit of Venus.

Prove that there will be a transit of Venus, provided that when the planet crosses the ecliptic, the heliocentric angular distance between the earth and Venus does not exceed 41'. The sun's apparent angular semi-diameter is taken as 16', the distance of Venus from the sun as ·72 times the earth's distance, and the inclination of its orbit to the ecliptic, $\sin^{-1} 1/17$.

5. Calculate by the method of Bessel the position of the axis of the cone of shadow at any given time during a solar eclipse and the local mean times of the commencement and ending of the eclipse.

Determine the criterion whether the solar eclipse is beginning or ending at the places lying on the intersection of the cone of shadow with the surface of the earth.

GROUP B.

6. Show that the apparent disk of a planet assumed to be a spheriod is an ellipse.

Proceed to find the apparent curve of illumination of a planet's surface as seen from the earth.

7. Prove that the effects of annual parallax in a star S which has a parallax σ on the distance D and position angle p of an adjacent S' which has no parallax are given by

$$D' = \sigma m \cos (\odot - M),$$

$$p' = \sigma m' \cos (\odot - M') \operatorname{cosec} D,$$

where $\odot$ is the longitude of the sun and m, M and m', M' are auxiliaries which you are required to specify.

Show that the greatest variation in the apparent distance of the two stars S and S' is

$$2\sigma (\sin^2\beta \cos^2 B + \sin^2 B)^{\frac{1}{2}},$$

where β is the latitude of S' and B is the angle which S' and either pole of the ecliptic subtends at S.

8. It (a_0, δ_0) be the coordinates of a star referred to the equator and equinox of some initial date and (a, δ) the same quantities referred to the equator and equinox of some other date, prove the following formulae of reduction

$$a - a_0 = a' - a + \zeta_0 + z,$$

$$\tan \tfrac{1}{2} (\delta - \delta_0) = \cos \tfrac{1}{2} (a' + a) \sec \tfrac{1}{2} (a' - a) \tan \tfrac{1}{2}\theta,$$

where
$$\tan (a' - a) = p \sin a/(1 - p \cos a),$$

$$p = \sin \theta (\tan \delta_0 + \tan \tfrac{1}{2}\theta \cos a),$$

$$a = a_0 + \zeta_0, \quad z = \zeta - \lambda,$$

θ is the arc joining the positions of the pole at the initial and final epochs. ζ, ζ_0 the amounts by which the angles at the two positions of the poles in the spherical triangle formed by these two poles and the pole of the initial ecliptic fall short of 90° and λ is equal to the total planetary precession on the equator of the final epoch.

9. If a. β. γ be the collimation, level and deviation errors of a transit instrument, prove that the correction t of the observed time of transit of a star whose declination is $\triangle$ is given by

$$\sin a + \sin \phi \sin \beta \sin \triangle - \cos \phi \cos \beta \sin \gamma \sin \triangle$$
$$-\cos \beta \cos \gamma \cos \triangle \sin t + (\cos \phi \sin \beta + \sin \phi \cos \beta \sin \gamma) \cos \triangle \cos t = 0,$$

where ϕ is the latitude of the place.

Assuming that the errors of the instrument are small quantities, prove that, if two stars of different declinations $\triangle_1$, $\triangle_2$ can be found for which the three errors of adjustment produce no error in the time of transit, the correction to be added to the observed time of transit of a star of declination $\triangle$ is

$$2a \sin \tfrac{1}{2}(\triangle - \triangle_1) \sin \tfrac{1}{2}(\triangle - \triangle_2) \sec \tfrac{1}{2}(\triangle_1 - \triangle_2) \sec \triangle.$$

10. Obtain the formulae of the reduction of a star from its mean place at the beginning of a year to its apparent place at the end of the year in the form

$$\Delta a = f + g \sin(G + a) \tan \delta + h \sin(H + a) \sec \delta + \mu_a \tau,$$

$$\Delta \delta = g \cos(G + a) + h \cos(H + a) \sin \delta + i \cos \delta + \mu_\delta \tau,$$

where f, g, etc., are the independent day numbers and μ_a and μ_δ the proper motions in R.A. and decl. respectively.

MIXED MATHEMATICS.

Seventh Paper

Lunar and Planetary Theories.

First Paper.

Examiners— { RAI A. C. BOSE, BAHADUR, M.A.
{ BIBHUTIBHUSAN DATTA, ESQ., M.SC.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer any six questions.

1. Prove that in an undisturbed elliptic orbit

$$w = f - 2e \sin f + (\tfrac{3}{4}e^2 + \tfrac{1}{8}e^4) \sin 2f - \tfrac{1}{3}e^3 \sin 3f + \tfrac{5}{32}e^4 \sin 4f - \ldots$$

as far as the order e^4: where $w =$ mean anomaly, $f =$ true anomaly, $e =$ eccentricity.

2. Expand the disturbing function of the moon's motion

$$R = \frac{m'}{\{(x - x')^2 + (y - y')^2 + (z - z')^2\}^{\frac{1}{2}}} - m' \frac{xx' + yy' + zz'}{r'^3}$$

in the form appropriate for Pontécoulant's theory, neglecting a/a', e', e^2 and γ^4, and obtaining the result

$$R = \frac{1}{a}\left(\frac{n'}{n}\right)^2 \{\tfrac{1}{4} + \tfrac{3}{4}\cos 2\xi - \tfrac{1}{2}e \cos \phi - \tfrac{9}{4}e \cos(2\xi - \phi) + \tfrac{3}{4}e \cos(2\xi + \phi) - \tfrac{3}{8}\gamma^2$$
$$- \tfrac{3}{8}\gamma^2 \cos 2\xi + \tfrac{3}{8}\gamma^2 \cos 2\eta + \tfrac{3}{8}\gamma^2 \cos(2\xi - 2\eta)\},$$

when the symbols have their usual significance.

3. Establish Laplace's Equation for the inverse of the projection of the radius vector of the Moon on the plane of the ecliptic.

$$\frac{d^2 u_1}{dv^2} + u_1 = \frac{1}{h^2}\frac{\partial F}{\partial u_1} + \frac{s}{h^2 u_1}\frac{\partial F}{\partial s} - \frac{1}{h^2 u_1{}^2}\frac{\partial u_1}{\partial v}\frac{\partial F}{\partial v} - \frac{2}{h^2}\left(\frac{\partial^2 u_1}{\partial v^2} + u_1\right)$$
$$\times \int \frac{\partial F}{\partial v}\frac{dv}{u_1{}^2}.$$

If in solving the equation we take as our first approximation

$$u_1 = a \{1 + e \cos (v - a)\},$$

we obtain at our higher approximations terms containing qv in their coefficient. How is this defect avoided by taking

$$u_1 = a \{1 + e \cos (cv - a)\}$$

as our first approximation ?

Upon what principle do we approximate to the value of c ? What is its physical significance ?

4. Give a brief outline of the theory of intermediate orbits in solving the lunar problem. In what way does Hill's method of choosing the intermediary differ from the classical method ?

Define the instantaneous ellipse and obtain formula for calculating its eccentricity.

5. Determine, up to the second approximation, the changes in the coordinates of the Moon, so far as they depend upon the parallax of the Sun only.

6. Find Hill's equations for the motion of the Moon in the form

$$D^2(us) - 2m(uDs - sDu) + \tfrac{3}{4}m^2(u + s)^2 - DuDs = C$$
$$D[uDs - sDu - 2m \ us] + \tfrac{3}{2}m^2(u^2 - s^2) = 0,$$

where u, s are semi-imaginary, C is a constant, m is the ratio of the Sun's mean motion to the Moon's synodic motion, and D is a differential operator.

Explain in general terms Hill's procedure in solving these equations.

7. Investigate the change in the Moon's latitude which is due to the secular change of the plane of the ecliptic.

8. Determine, after Adams, the motions of the Moon's node in the case when the orbits of the Sun and Moon are supposed to have no eccentricities, and when their mutual inclination is supposed to be small.

9. Investigate, after Laplace, the cause of the secular acceleration of the Moon's mean motion. What is Adams' objection to it.

10. Write a short note on the Variational Curve. What is its relation with Hill's Intermediary, and how it is affected by the parallactic inequalities ?

MIXED MATHEMATICS.

Eighth Paper.

Lunar and Planetary Theories.

Second Paper.

Examiner—Bibhutibhusan Datta, Esq., M.Sc.

Answer any six questions.

1. Prove that if n bodies are subject to no forces except their mutual attractions the sums of the products of their masses and the projections of the areas described by the corresponding radii are proportional to the time.

2. Find the expressions for the variations of the major axis and the eccentricity of a disturbed orbit in terms of the partial derivatives of the disturbing function.

3. Prove that whatever system of elements be adopted, we can always express their differential coefficients in terms of the partial differential coefficient of the disturbing function R with respect to them, multiplied by coefficients which *do not* involve time explicitly.

4. If

$$(1 + a^2 - 2a \cos \psi)^{-s} = \tfrac{1}{2} \sum_{-8}^{+\infty} I_s^{(i)} \cos i \psi$$

when $a < 1$, prove that

$$I_s^{(i)} = a \frac{2a I_{s+1}^{(i-1)} - (1 + a^2) \ I_{s+1}^{(i)}}{i - s}.$$

5. Prove that the unsymmetrical part of the disturbing function of a planet does not contain any secular term.

6. Enunciate and prove, neglecting small quantities of the second and higher orders, Laplace's celebrated theorem about the stability of our solar system.

7. Explain what is long period inequality of a disturbed planet. Shew that its effect is greatest on the mean longitude of the planet.

8. Prove that if the perihelion of a planetary orbit is not fixed, it always turns in the same direction *save* an oscillation.

9. Enumerate and prove the various effects of a resisting medium upon the elliptic elements of a disturbed planetary orbit.

10. Explain the fundamental difference between the lunar and planetary theories and indicate how this renders necessary the employment of different modes of investigation.

PHYSICS.

ELECTRICITY AND MAGNETISM.

FIRST PAPER.

Examiners— { D. B. MEEK, ESQ., M.A., B.SC. { S. K. ACHARYYA, ESQ., M.SC.

Candidates are required to give their answers in their own words as far as practicable.

Answer Question 1, and two others, from Group A.

Full marks—50.

GROUP A.

1. Write a full and complete note on Electric Units.
2. Define carefully Green's function and find it for a spherical conductor kept at zero potential under the influence of a positive unit charge at an external or internal point.
3. State the general problem of Electrostatics and show that if one solution can be found that solution is unique.

A conductor is formed by the outer surfaces of two equal spheres. The angle between their radii at any point on the circle of intersection is 120. Find the capacity of the conductor.

4. Solve the problem of a point charge between two infinite conducting planes. Invert the solution and hence find the distribution on two mutually influencing spheres in contact.

Not more than THREE *questions to be attempted from Group B.*

GROUP B.

1. Give an account of Langevin and Weiss's theory of Magnetism with special reference to the experimental works of Curie and Honda.

Or,

Show that the potential of a given distribution of magnetism can be regarded as arising from a certain surface and volume distribution. Prove that the potential of a body uniformly magnetised with intensity I is, at any external point, the same as that due to a complex magnetic shell coinciding with the surface of the body and of strength Ix, where x is the co-ordinate measured parallel to the direction of magnetisation.

Two small magnets, fixed on a platform, float horizontally on the surface of water, one along the direction of the straight line joining their centres and the other at right angles to it. Show that there is a resulting couple acting on the platform which would rotate it continuously. Is this consistent with the principle of Conservation of Energy ? If not, state how the phenomenon is to be explained.

2. Distinguish between Magnetic Induction and Magnetic Force. Show that the energy of a magnetic field can be expressed by the equation

$$W = \frac{1}{8\pi} \iiint (a^2 + \beta^2 + \gamma^2) \, dx \, dy \, dz.$$

A magnetic particle of moment 'm' lies at a distance 'a' in front of an infinite block of soft iron bounded by a plane face to which the axis of the particle is perpendicular. Find the force acting on the magnet and show that the potential energy of the system is

$$-\frac{m^2(\mu-1)}{8a^3(\mu+1)}$$

3. Explain clearly what is meant by "Specific Heat of Electricity." Give the reasoning which led Lord Kelvin to predict its existence. Give a brief account of an experimental method of measuring it.

Show how the E.M.F. of a cell may be deduced from the quantities of heat evolved in the chemical reactions that take place in the cell, and prove that the correction for the temperature variation of E.M.F. is

$$T\frac{dE}{dT}.$$

4. Discuss the method of measuring the resistance of a cell by placing it in one arm of a Wheatstone's Bridge. Prove that the total heat generated in two wires, arranged in multiple arc, is less than it would be if the current were to divide between them in any proportion other than that demanded by Ohm's Law.

The resistances of the opposite sides of a Wheatstone's Bridge are a, a' and b, b' respectively. Show that if the two diagonals which contain the battery and galvanometer are interchanged

$$\frac{E}{c} - \frac{E}{c'} = \frac{(a-a')(b-b')(G-R)}{aa'-bb'},$$

where c and c' are currents through the galvanometer in the two cases, G and R are the resistances of the galvanometer and battery conductors, and E the electromotive force of the battery.

5. An infinite conducting sheet has a source and an equal sink. Determine the current lines and lines of flow. Prove that in the case of two-dimensional flow

$$4\pi \times \text{Resistance} \times \text{Capacity} = k\,\rho,$$

where ρ=specific resistance of the material. Hence or otherwise, show that the resistance per unit length of a shell of conducting material bounded by two co-axial cylindrical surfaces radii ' a ' and ' b ' is equal to

$$\frac{\rho}{2\pi} \log \frac{b}{a}.$$

PHYSICS.

ELECTRICITY AND MAGNETISM.

SECOND PAPER.

Examiners—$\left\{ \begin{array}{l} \text{W. A. JENKINS, ESQ., M.SC.} \\ \text{ABINASCHANDRA SAHA, ESQ., M.SC.} \end{array} \right.$

Not more than FOUR *questions to be attempted.*

Full marks can be obtained by answering THREE *fully.*

GROUP A.

1. All matter is in its elementary nature reducible to the same basis. Discuss this in the light of modern knowledge, illustrating your answer by tracing the transformation products of some radioactive material.

State your ideas of the nature of the elemental constituents of matter.

2. Write a short account of the natural ionisation of the atmosphere.

3. Write short notes on *three* of the following :—

   (*a*) Photo-electric fatigue.
   (*b*) Asymetry in the distribution of the velocities of the photo-electrons emitted from both sides of thin films.
   (*c*) Emission of negative electrons from hot bodies.
   (*d*) Lorentz's deformable electron.

4. What is the essential difference between ordinary light and X-rays ?

What were the chief difficulties experienced in obtaining evidence as to the electro-magnetic nature of X-rays, and how were these overcome ?

5. Describe in detail—with diagrams—how you would carry out experiments to compare the ionising powers of X-rays and the Y-rays emitted from a given sample of radioactive matter.

(The description should include the production of the ' X '-rays and the isolation of the ' Y '-rays from the a- and β-rays).

Not more than THREE *questions are to be attempted.*

The questions are of equal value.

GROUP B.

1. Describe, with necessary theory, a modern experimental method of determining the charge carried by an electron.

2. Write a short account of the Theory of Ionisation of Gases by Collision, and apply it to explain the Discharge of Electricity through Gases.

A difference of potential is maintained between two parallel metal plates A and B placed at a distance d apart. Negative ions are liberated from the surface of the negatively charged plate A, by the action of ultraviolet light. If n_0 be the number of negative ions set free per second, show, that the number reaching the positive plate B is $n_0 e^{ad}$, when the ionisation is supposed to be due to the collision of negative ions only.

3. Describe an experiment designed to measure the velocities of Cathode rays required to produce characteristic radiations of different substances. What result has been obtained ?

State Planck's Quantum Hypothesis, and from the following data establish the relation between the quality of Nickel $K(a)$ radiation, and the amount of energy concerned in its production and absorption.

Atomic weight of Nickel $= 61.7$.

Mass of an electron $= .9 \times 10^{-27}$ gm.

Wave-length of Ni $K(a)$ radiation $= 1.662 \times 10^{-3}$ cm.

Planck's constant $= 6.55 \times 20^{-27}$.

4. In a transformer the primary circuit has self-inductance L and resistance R, while those of the secondary are N and S, the coefficient of mutual induction being M. Show that the effective self-induction of the primary is

$$L - \frac{M^2 N p^2}{N^2 p^2 + S^2},$$

and find its effective resistance, where the period of the currents is $2\pi/p$.

What practical consequences in the design of transformers have been deduced ?

5. (a) A charged sphere is moving through a dielectric with a uniform velocity small compared with that of light, find the total kinetic energy of the sphere.

(b) Discuss the motion of a charged particle projected with any velocity v in a magnetic field.

PHYSICS.

GENERAL PHYSICS.

Examiners— $\left\{\begin{array}{l} \text{DR. SUDHANSUKUMAR BANERJEE, D.SC.} \\ \text{SATYENDRANATH BASU, ESQ., M.SC.} \end{array}\right.$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer SIX *questions, three from each half, of which Question* 11 *must be one.*

FIRST HALF.

1. Discuss the motion of a compound pendulum, and show that the centres of suspension and oscillation are mutually convertible.   16
   Prove that the time period

$$T = 2\pi \sqrt{\frac{h^2 + k^2}{gh}} \left(1 + \frac{a^2}{16} \right) \text{ nearly,}$$

where h is the distance of the centre of gravity from the point of suspension, k the radius of gyration about the parallel axis through the centre of gravity, and $2a$ the angle through which it oscillates.

2. Explain how Lagrange's equations may be used to determine the small oscillations of a system about its position of equilibrium.   16
   Two masses m, M are connected together by a string of length b and suspended from a fixed point by means of a string of length a attached to the mass m. The whole system is slightly displaced from the equilibrium position. Find the periods of small oscillation of the system.

3. In the case of a rectangular plate bent by couples applied only at the extremities, show that the strain-energy per unit of area is   16

$$W = \tfrac{1}{2} D \left[\frac{1}{\rho_1^2} + \frac{1}{\rho_2^2} + \frac{2\sigma}{\rho_1\rho_2} \right],$$

where ρ_1 and ρ_2 are the principal radii of curvature of the neutral plane, D the flexural rigidity, and σ the Poisson's ratio.

4. A wire is twisted by terminal couples round the axis: show that   16

$$u = -\tau yz, \quad v = \tau zx, \quad w = \tau\phi.$$

Find ϕ, when the cross-section is an ellipse, and also calculate the twisting couple.

5. Obtain the equations of motion of an incompressible homogeneous liquid, and show that in the case of steady motion   16

$$\frac{p}{\rho} + \tfrac{1}{2}q^2 + V = \text{const.},$$

where q is the velocity and V the potential of the extraneous forces. Hence explain the working of a common water pump.

6. In a canal of uniform depth h with parallel vertical sides, show that long waves will travel with velocity $\sqrt{gh}$.   16

SECOND HALF.

7. Find the magnitude and direction of attraction at any point, **16** of an uniform finite rod, attracting according to Newton's law. Show that the level surfaces are obtained by rotating confocal ellipses round the rod as axis.

8. In an experiment made to determine viscosity by Searle's **16** Viscometer, the following observations were recorded :—

Radius of the outer cylinder   = 2·543 cm.
Radius of the inner cylinder   = 1·865 cm.
Effective diameter of the drum = 1·91 cm.
           Mass of each pan =   10 gms.

Load on each pan.	Time of one revolution.	Length in liquid in cm.
30	27·9	1·30
40	33·3	2·35
60	29·9	3·40
80	27·3	4·30
90	29·5	5·30

Calculate the viscosity of the substance.

9. Write a short note on Laplace's theory of capillarity.   **16**
10. Discuss the stability of a cylindrical film.   **16**
11. Write a short essay on any one of the following subjects :— **20**
  (a) The accurate determination of g at various points on the surface of the earth.
  (b) Brownian movement.
  (c) Various methods of determining the Avagadro number.

PHYSICS.

SOUND.

Examiners— { J. C. MUKHERJEE, ESQ., M.A.
            { C. C. BHATTACHARYYA, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer SIX *questions, three from each half.*

Question 12 must be one.

FIRST HALF.

1. Expand $y=f(x)$ in sine series, when   **16**

$$f(x) = x \text{ from } x=0 \text{ to } x=\frac{\pi}{2},$$

and $$f(x)=\pi-x \text{ from } x = \frac{\pi}{2} \text{ to } x=\pi,$$

and show that the series curve will approach $y=f(x)$ closer and closer by taking a greater number of terms in the expansion.

2. If a point in a sitar string, whose distance from one end is $\dfrac{1}{n}$ th 16 of the length of the string, is drawn aside by the player's finger to a distance b from its position of equilibrium and then released, show that the form of the vibrating string at any instant is given by the equation

$$y = \frac{2bn^2}{(n-1)\pi^2} \sum_{m=1}^{m=\infty} \left(\frac{1}{m^2} \sin \frac{m\pi}{n} \sin \frac{m\pi x}{l} \cos \frac{m\pi a t}{\tau} \right).$$

Show from this that all the harmonics of the fundamental note of the string which correspond to forms of vibration having nodes at the plucked point will be absent in the complex note actually sounded.

3. A string having its extremities fixed is vibrating transversely 16 in a period p. If a small mass be attached to a point distant l_1, l_2 from the ends, prove that the period is increased in the ratio

$$1 + \frac{\sigma \sin^2 2\pi l_1}{pa} : 1,$$

where σ is the ratio of the mass attached to the mass of the string and a is the velocity.

4. Establish the equation of vibration of a bar vibrating laterally, 16 and find out the forms of the normal functions in the case of a free-free bar.

5. Investigate the case of a uniform circular ring vibrating in its 16 own plane, and show that

$$n^2 = \frac{s^2 (s^2 - 1)^2}{s^2 + 1} \cdot \frac{E k^2}{\rho a^4}.$$

6. Form the dynamical equation of a vibrating membrane and as- 16 certain the normal modes of a square membrane.

SECOND HALF.

7. Give the theory underlying the production of Kundt's dust 16 figures, and explain the occurrence of striations in them.

8. Describe and explain Lord Rayleigh's method for determining 16 the minimum amplitude audible.

9. "A self-maintaining stationary aerial wave is an impossibility 16 whatever may be the velocity of the general current, or in other words, a wave cannot be propagated relatively to the undisturbed parts of the gas without undergoing an alteration of type." Discuss the above statement.

10. 'Two simple vibrations of sufficient amplitude may give rise 16 not only to the corresponding pure tones, but to their octaves, as well as to certain combination-tones.' Justify the above statement.

11. Classify the common musical instruments and investigate into 16 their peculiar modes of production and musical qualities.

12. Write an essay on any one of the following subjects :— 20

(1) Maintenance of vibration.

(2) Human ear.

(3) Tempered intonation.

(4) Composition of vowel tones with special reference to Bengali vowels.

PHYSICS.

LIGHT.

FIRST PAPER.

Examiners—$\left\{\begin{array}{l}\text{PHANINDRANATH GHOSH, ESQ., M.A.} \\ \text{P. MAHALANOBIS, ESQ., B.A.}\end{array}\right.$

*Candidates are required to give their answers in their own words
as far as practicable.*

Only THREE *questions need be attempted.*

Questions carry equal marks.

FIRST HALF.

1. "In a prism spectrometer, the image of the slit may appear infinitely broad or infinitely narrow and may have any apparent breadth between the two extremes, depending on the value of the angle of incidence."

Explain this statement.

2. In the case of an ideal optical imagery due to coaxial optical system, the lateral, axial and angular magnifications are denoted by Y, X, Z respectively.

Determine their values and show that

$$\frac{Y}{XZ} = 1$$

and that Y and Z may have any value between $-\infty$ to $+\infty$, whereas X varies from 0 to ∞.

3. Two paraxial rays from two axial points passing through a centered system of refractive media, bounded by spherical surfaces, strike the surfaces at the heights

$$h_1, \bar{h}_1, h_2 \bar{h}_2 \ldots \ldots h_n \bar{h}_n$$

Show that :—

$$h_1 \bar{h}_1 (J_1 - \bar{J}_1) = h_2 \bar{h}_2 (J_2 - \bar{J}_2) = \ldots h_n \bar{h}_n (J_n - \bar{J}_n),$$

where J's are the zero invariants.

4. Show that a plano-convex lens is strongly under-corrected when the plane face is turned towards the object at infinity but only feebly under-corrected when the convex face is turned towards it.

5. Discuss the importance of the term "Numerical Aperture" in connection with modern microscopes, and determine the condition under which a finely periodic structure is correctly seen through a microscope.

6. A right-angled flint glass prism of refractive index n_2 is cemented to a crown glass one of refractive index n_1 and refracting angle i_1 to produce a direct vision combination, the rays coming out of the flint prism normally.

Show that the dispersion of the system is given by

$$-\frac{dn_1}{n_2} \cdot \frac{\sin i_1}{\cos a_1' \cos a_2'} - \frac{dn_2}{n_2} \tan (a_1 - i_1),$$

where a_1 and a'_2 are the angles of incidence and emergence from the crown glass prism.

Not more than THREE *questions to be attempted.*

The essay is equivalent to TWO *questions.*

SECOND HALF.

1. A large plano-convex searchlight condenser is fixed with its plane face vertical. It is 20″ (twenty inches) in diameter and is 5″ (five inches) thick at its widest part.

It is required to project an *oblique* beam of light downwards at an angle of about 60° (sixty degrees) with the vertical. Find the best position for a small arc lamp [$\mu = 1\cdot5$].

2. Write a short note on the maximum velocity of light and its implications in Physics.

3. Two similar non-telescopic optical systems of focal length 10″ (ten inches) are placed with a distance "*d*" inches between *adjacent* focal points. An object 2″ (two inches) high is placed at a distance of 20″ (twenty inches) from an *outer* focal point.

Plot a curve showing the relation between magnification and *d*, the distance between adjacent focal points. Find the size of the image when *d* is zero.

4. A photographic objective of equivalent focal length 11″ (eleven inches) is made up of two components of focal lengths 17″ (seventeen inches) and 21″ (twenty-one inches) respectively.

Where would you place a diaphragm in between the lenses in order to get images free from distortion ?

What is the best position for the stop, when both components have the same focal length of 20″ (twenty inches) ? What are the special advantages in having such similar components ?

5. Write an essay on *one* of the following subjects :—

(i) X-rays and Light.

(ii) The fundamental assumptions of geometrical optics.

PHYSICS.

LIGHT.

SECOND PAPER.

Examiners—$\begin{cases} \text{S. K. MITRA, ESQ., M.SC.} \\ \text{D. K. MAJUMDAR, ESQ., M.A.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

Only SIX *questions, three from each half, are to be attempted.*

Essays will be counted as two questions.

The same value is attached to each question.

FIRST HALF.

1. Distinguish between the Fresnel and Fraunhofer class of diffraction phenomena. Describe some experimental arrangement by means of which the two classes of diffraction can be conveniently studied.

Plane waves of light are incident on a narrow slit; discuss briefly the diffraction pattern at a great distance behind the slit. If instead of a single slit two parallel narrow slits are used, the distance between them being equal to four times the width of each, show by drawing on a graph paper the general nature of the illumination-curve (Fraunhofer class).

2. (a) Draw figures to show the nature of the wave-surface in a biaxial crystal. Distinguish between the axes of single ray velocity and single wave velocity. With which of these two do the optic axes coincide?

(b) Show by means of a diagram the position of these axes in a crystal with reference to the wave-surface, and find out the angle between the axes of single-ray velocity in terms of the principal velocities.

3. (a) How can you find out the temperature of the Sun by observing the spectral distribution of energy in sunlight?

(b) What is Balmer series? How can it be explained by Bohr's atomic model? Name two other series which confirm Bohr's theory.

4. Obtain expressions connecting the refractive index, absorption index and wave length in any medium. How are the relations simplified in the case of a transparent medium?

5. Write an *essay* on the development of the theory of Relativity.

SECOND HALF.

6. Characterise the several methods of measuring the velocity of light. What evidence is there that light is propagated across interstellar space without dispersion?

The ratio of the refractive index of Carbon bisulphide to that of air = 1·785, as calculated from measurements of velocity and 1·64 as directly found. How would you explain the discrepancy?

7. In observing Newton's rings we use a microscope, while we use a telescope for Michelson fringes. Why? Give reasons for your answer and obtain an expression for the position of the fringes.

8. Give the theory of the Echelon grating and find an expression for its resolving power. What are the special uses it has been put to?

9. Give Fresnel's explanation of the rotation of the plane of polarisation in a magnetic field. What experimental evidence is there of the truth of his theory ?

10. Write an *essay* on any one of the following subjects :—

(a) Interference methods of Spectroscopy.

(b) Recent works on magneto-optics.

PHYSICS.

HEAT.

FIRST PAPER.

Examiners— { S. N. MAITRA, ESQ., M.A.
{ C. V. RAMAN, ESQ., M.A.

Answer not more than THREE *questions in Part I and not more than* THREE *in Part II.*

Question 10 counts as two questions.

All other questions are of equal value.

PART I.

1. Describe and discuss the continuous flow method of finding the mechanical equivalent of heat.

2. Give an account of what is known regarding the thermal dilatation of crystals.

3. Establish the equation for the linear propagation of heat along a bar heated at one end, and show how if the heating be periodic, the conductivity of the bar may be determined.

4. Explain the methods adopted for the production of very low temperatures.

5. Find the relation between the viscosity of a gas and the mean free path of a molecule on the kinetic theory. How is the viscosity related to the thermal conductivity ?

PART II.

6. Give an account of the methods used and the results obtained in the determination of the solar radiation constant.

7. Deduce Stefan's law for total radiation from thermodynamic considerations and describe any experimental investigation by which it has been confirmed.

8. Give an account of the phenomena of the convection of heat, with special reference to recent investigations on the subject.

9. Describe the principal methods adopted for the determination of vapour densities.

10. Write an essay on *one* of the following subjects :—

(a) Theoretical deduction of the law of distribution of energy in the spectrum of thermal radiation.

(b) Specific Heats of Bodies at low temperatures.

PHYSICS.

HEAT.

SECOND PAPER.

Examiners— { MEGHNAD SAHA, ESQ., M.SC.
{ DR. D. N. MALLIK, B.A., SC.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer THREE *questions from each half.*

The essay counts as two questions.

FIRST HALF.

1. Establish from thermodynamical principles the Clausius-Cla- 16
peyron relation

$$\frac{L}{\theta(v_1 - v_2)} = \frac{\partial p}{\partial \theta}.$$

Latent heat of ice at 0° is 80 calories and the density of ice is ·916.
What must be the external pressure in order that ice may melt
at $-1°C$?
   ($L=$latent heat, v_1, v_2 the specific volumes of water and ice, $\theta=$
absolute temperature).
   2. Prove that   16

$$C_p - C_v = -\theta \left(\frac{\partial p}{\partial V}\right)_\theta \left(\frac{\partial V}{\partial \theta}\right)_p^2$$

Calculate the specific heat at constant volume of mercury from the
following data :—
   $C_p = ·0333$, coefficient of cubical expansion of mercury $= 1·81 \times 10^{-4}$;
Decrement of volume for an external pressure of 1000 atmospheres
$=3·9 \times 10^{-3}$ of the original volume.
   3. Prove that the thermodynamic scale of temperature is coinci-
dent with the scale of the perfect gas thermometer. How would you
calculate the temperature of melting ice on the absolute scale ?
   The coefficient of expansion of CO_2 at N.T.P. is $3·71 \times 10^{-3}$, and
the Joule-Thomson cooling effect at the temperature of melting-ice
$1·005$ degrees C per pressure difference of one atmosphere. Calculate
the temperature of melting ice on the absolute scale.
   4. Show how from observations of the specific heats, we can deter-
mine the atomic weight of an unknown elementary gas. How far
would the inference be conclusive ?
   Deduce the law of Dulong and Petit from the kinetic theory. Is it
rigorously obeyed in all cases ? If not, assign reasons for discrepancy.
   5. Using the Van der Waal's equation

$$p = \frac{R\theta}{v-b} - \frac{a}{v^2},$$

find the values of the critical volume, pressure, and temperature in
terms of the coefficients. Explain the physical significance of ' a ' and
' b,' and describe methods of determining them experimentally.

SECOND HALF.

6. Find an expression for the pressure of radiant energy from thermodynamical principles. Give an account of any experimental work for verifying the existence of the pressure.

7. What is meant by the black-body temperature of an incandescent solid ? What are the principles by which the black-body temperature can be determined ? Describe an apparatus by means of which the black-body temperature of a furnace can be determined.

8. Answer any two of the following with adequate reasons:—

(a) By analysing the continuous spectrum from a black-body, it is found that the maximum emission of energy takes place at the wave-length $\lambda = 1\cdot 2\mu$; what is the temperature of the body ?

(b) Dry saturated steam is confined within a heated chamber under a pressure of 5 atmospheres. What would take place if the chamber be suddenly opened ?

(c) Water under 4°C is confined within a piezometer under a high pressure. Suppose the pressure to be suddenly removed. Do you expect a cooling or a heating effect ?

(d) A system oscillating horizontally is successively suspended within different closed vessels (the sizes of which are large compared with that of the oscillating body), containing air at pressures of $(1 \times 10^{-3}$ mm., 1 atmosphere, 100 atmospheres). How would the logarithmic decrement of amplitude vary ?

9 and 10. Write an essay on any *one* of the following subjects :—

(i) The Second Law of Thermodynamics.

(ii) The determination of the Avogadro number N.

GENERAL PHYSICS AND SOUND—PRACTICAL.

1. Find the temperature coefficient of the surface tension of the given liquid.

2. Determine the viscosity of the given liquid by Searle's Viscometer.

3. Find the coefficient of restitution of the material of the given pair of balls by photographic method.

4. Determine the pitch of the given inaudible note by sensitive flame.

5. Find the temperature coefficient of the pitch of the given tuning fork.

6. Find the time-period of the vibrator of the Induction coil by Stroboscopic method.

7. Photograph the vibration of the bowed string and verify Helmholtz's velocity law. (Two days).

CHEMISTRY.

PHYSICAL—GENERAL.

Examiner—J. BHADURI, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Not more than FIVE *questions to be attempted.*

1. Discuss thoroughly the principles underlying the methods of   20
Claude and Linde for manufacturing liquid air. How is Hydrogen
liquefied by the Linde process ?

2. Describe Clement and Desorme's method of determining the   20
ratio of specific heats of gases. Give the theory of the method.
Indicate other ways of finding out the same ratio and point out the
importance of this ratio in ascertaining the complexity or otherwise
of gaseous molecules.

3. Deduce the relation between the molecular heat of evaporation   20
of a liquid and its vapour pressure at different temperatures.
    The vapour pressure of water at 99·5°C is 746·52 mm. and at
100·5°C is 773·69 mm. The specific volume of water vapour amounts
to 1·674 litres at 100°C. Calculate the latent heat of vaporisation of
water.

4. Describe the experiments of Lemoine and Bodenstein on the   20
formation of Hydrogen Iodide from Hydrogen and Iodine. How do
you account for the phenomena that up to 320°C, rise of temperature
favours the production of Hydrogen Iodide, while above that tem-
perature the amount of Hydrogen Iodide formed decreases ?

5. What are liquid crystals ?   20
    Describe their properties and give an account of the theories which
explain their behaviour.

6. Deduce the phase rule.   20
    Discuss the changes in the system $CaCl_2$ and H_2O or $FeCl_3$ and
H_2O produced by changes in concentration and temperature.

7. Explain why ions move with a constant velocity in a solution   20
of electrolyte under a given potential gradient. Describe how
Hittorf's determination of transport numbers and Kohlrausch's
determination of molecular conductivity can be utilised for calculat-
ing the absolute velocity of ions.

8. Describe thoroughly the properties of Radium Emanation.   20
Describe briefly some experiments which enable us to identify the
short-lived products of Niton, viz. Ra A, Ra B, Ra C.

9. What do you understand by colloidal solutions ? Give two   20
methods of preparing colloidal platinum in water. Describe its
properties.

CHEMISTRY.

PHYSICAL—SPECIAL.

Examiner—J. BHADURI, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Not more than FOUR questions to be attempted.

1. Deduce a general equation connecting Osmotic work and   25
lowering of vapour-pressure by means of an isothermal cycle, assum-
ing that the vapour behaves as a perfect gas. Under what assump-
tions does Van't Hoff's extension of the laws of perfect gases to
solutions hold good ?

2. How would you proceed to determine the composition of the   25
ion $Ag(NH_3)'_n$ formed by adding a solution of ammonia to silver-
chloride ?

Calculate the E.M.F. of the cell

$$Ag \quad \cdot O/ N. \; AgNO_3 \quad /N \; Kcl \quad Ag$$
$$+ \qquad \qquad Agcl$$
$$/N. \; NH_3$$
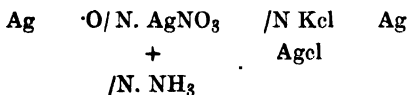
at 25°c, where the solubility of AgCl in pure water is $1·4 \times 10^{-5}$ gm.
molecules per litre, and

$$K = \frac{[Ag] \, [NH_3]^2}{[Ag(NH_3)'_2]} = 5·4 \times 10^{-8}$$

$R = 83·2 \times 10^6$ ergs; charge carried by 1 gr. equivalent $= 9654$ C.G.S.
units; volt $= 10^8$ C.G.S. units. [Neglect the liquid potential differ-
ence.]

3. How would you determine the order of a reaction ? How far   25
does the velocity determination elucidate the mechanism of a reac-
tion ?

4. Discuss briefly *two exact* methods of determining Avogadro's   25
Number.

5. Discuss the assumptions made by Van der Waals in deducing   25
his Equation of State. Describe how far it agrees with the actual
behaviour of gases as regards variation of pressure and temperature.

6. How do you account for the variation of specific heats of solids
with temperature, especially in regions of low temperature ?

7. Discuss fully the physico-chemical principles involved in Haber's   25
process for fixation of Nitrogen.

CHEMISTRY.

INORGANIC—GENERAL.

Examiner.—SIR P. C. RAY, KT., D.SC., PH.D., F.C.S.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only SIX *questions to be attempted, not more than two from
each group.*

Each question carries the same number of marks.

GROUP A.

1. What are the main objections to the Periodic Classification, and how are they met ?

Discuss the isomorphous relationships obtaining between similar Compounds of the elements occurring in the same groups of the Periodic Classification.

2. Describe how liquid air is manufactured. How has its discovery contributed to the future development of chemical research pure and industrial ?

3. Give as full an account as you can of the life and work of *either* (i) Sir William Ramsay *or* (ii) Henri Moissan.

GROUP B.

4. Describe the more recent improvements introduced in the Sulphuric Acid manufacture by the Lead Chamber Process. Discuss the theories of the reactions involved.

5. Give an account of the preparation of the oxyacids of chlorine. Arrange them in the order of their oxidising powers, stating fully the reasons for it. To what uses are their salts put in industry ?

6. How are the various compounds of nitrogen and hydrogen prepared ? Compare their behaviours and discuss their constitution.

7. Compare the physical and chemical properties of the elements, sulphur, selenium, tellurium and their hydrides, oxides, and oxyacids. Discuss the position of these elements in the Periodic Table.

GROUP C.

8. How is bleaching powder manufactured on an industrial scale ? Discuss its constitution. How would you estimate the quantity of chlorine available for oxidation, in a given sample of the substance ?

9. Describe the chief methods of extracting gold as adopted in India and outside, explaining fully the chemistry involved in and the reasons for adopting each of the steps in the process.

10. Starting from pyrolusite, how would you prepare the various oxides and oxyacids of manganese ?

Discuss fully the use of potassium permanganate as a reagent in chemical analysis.

CHEMISTRY.

INORGANIC—SPECIAL.

Examiner—SIR P. C. RAY, KT., C.I.E., PH.D., F.C S.

Candidates are required to give their answers in their own words as far as practicable.

Only FIVE *questions to be attempted.*

Each question carries the same number of marks.

1. Give a brief account of the various modern methods of Steel production, discussing the comparative merits of each. Enumerate the various kinds of steel prepared in industry, and mention their uses.

2. Classify the Cobaltammines. Summarise the work done to elucidate their constitution. Give the theories put forth to account for their structure.

3. Explain why it is not possible to prepare hydriodic acid above a certain strength by the action of sulphuretted hydrogen on iodine in presence of water. How would you prepare pure hydriodic acid of a maximum concentration ? Write what you know about the dissociation of gaseous hydriodic acid.

4. How are nitrites and nitrates prepared on an industrial scale with the help of electricity ? Give a detailed account of their manufacture and forecast the future of the industry.

5. How would you separate Platinum and the allied metals of that group ?

6. Write an essay on any one of the following industries :—·
(i) glass, (ii) porcelain, (iii) alkali.

7. Discuss the phenomenon of Catalysis. Describe fully two well-known instances where the success of an industry depends upon the use of the Catalysts.

———

CHEMISTRY.

ORGANIC—GENERAL.

Examiner —DR. P. C. MITTER, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

Only SIX *questions may be attempted.*

The questions carry equal number of marks. •

1. A compound has the following percentage composition :—

$$C=81·55, H=4·8, N=13·6.$$

Its vapour density is $51·15$.

It evolves ammonia on boiling with KOH. The original substance on reduction with sodium and alcohol forms a base which reacts with nitrous acid giving off nitrogen and yielding an alcohol. The alcohol can be oxidised to benzoic acid. What is the original substance ?

2. Give an account of the preparation, properties and general reactions of the acetylenes.

3. Describe the various methods by which mono-saccharoses can be synthesised. Explain how the constitution of galactose or mannose has been arrived at.

4. Give practical details for the preparation of the following:—
Phenyl Azoimide, Cyclohexanol, Triphenyl Carbinol, Phenacetin, Isonitroso-camphor, Glycocoll.

5. State briefly the principal methods of preparation, properties and chemical reactions of the mono-amido-phenols.

6. Discuss fully the constitution of camphor or pinene.

7. Discuss fully the Hantzsch-Werner hypothesis and its application to the determination of the configurations of the oximes.

8. Describe any *one* method for preparing *each* of the following types of compounds:—Pyrazols, furanes, xanthones, pyrrolidines, indols, phenazines.

9. Write a short essay on Thiele's Theory of partial valencies.

CHEMISTRY.

ORGANIC—SPECIAL.

Examiner—DR. P. C. MITTER, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

Only SIX questions may be attempted.

The questions carry equal number of marks.

1. Give a short historical review of the rise and development of the coal-tar colour industry.

2. Give a short account of the methods of preparation, properties and the important chemical reactions of the *di-ketones.*

3. Enumerate, with examples, the various types of condensation which have been brought about by the following reagents:—
   (a) Sodium ethoxide, (b) aluminium chloride, (c) sulphuric acid.

4. How are the following substances prepared, and what are their uses:—
   Amidol, Ionone, Thio-indigo, β-Eucaine, Veronal, Michler's Ketone.

5. Describe the synthesis of any two of the following substances:—
   (a) Terpenylic acid, (b) terebic acid, (c) camphoronic acid.
   Point out the importance of a correct knowledge of their structure for determining the constitution of the terpenes.

6. Discuss the influence of the (a) nature, (b) number, and (c) position of the (1) chromophores and (2) the auxochromes on the colour of organic compounds.

7. Describe how you would synthesise (1) theophylline, (2) caffeine, (3) guanine, and (4) adenine, starting from uric acid.

8. Give an account of our present knowledge about the relationship between chemical constitution and physiological action of organic compounds.

9. Give a brief résumé of the different methods which are available for determining the constitutions of the natural alkaloids.
   Establish the constitutional formula of either piperine or papaverine.

BOTANY.

FIRST PAPER.

Examiners—{ DR. P. BRÜHL, D.Sc., I.S.O., F.C.S., F.G.S.
S. C. BANERJEE, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions carry equal marks.

1. Give a general account of floral phyllotaxy and its relation to the phyllotaxy of foliage-leaves. Describe the floral phyllotaxy of *Nymphaea alba* Linn., and of *Gynandropsis pentaphylla* DC. What conclusions do you draw from the two cases as regards the morphological nature of flowers?

2. "Three generations are represented in a seed." Explain this statement and illustrate it by histological diagrams.

3. Classify hydathodes and give an account of their structure and functions.
Or,

Give a general account of the external outlets of the ventilating system in phanerogams and a more detailed account of the histology of one of the several types of pneumathodes.

4. What do you understand by "Storeys of Vegetation" in a forest? How many storeys of vegetation may be found in the undergrowth of a tropical rain-forest? Characterize each of them.
Or,

Give an account of lianes and epiphytes as constituents of tropical rain-forests.

5. Write notes on the fixing, dehydrating, and clearing of microscopic sections.
Or,

Describe in detail how you would proceed to study the floral development and the spermatogenesis of a Composita, such as *Grangea maderaspatana* Poir., or *Launea asplenifolia* DC.

BOTANY.

SECOND PAPER.

Examiners— { DR. P. BRÜHL, D.Sc., I.S.O., F.C.S., F.G.S.
J. C. NAG, ESQ., B.Sc.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions carry equal marks.

1. Compare the fructification of the different groups of Ascomycetes, and give an account of the formation of the different kinds of spores in Pucciniaceae.

Or,

Give an account of the life-history and cytology of the Cyanophyceae.

2. Give a detailed account of the development of the embryo in Anthoceras and in Sphagnum.   *Or,*

Compare the development of the sporogonous tissue in Lycapodiaceae and Isoetaceae.

3. "The endosperm of Gymnosperms seems to be clearly the vegetative tissue of the female gametophyte, but the morphological nature of the endosperm of the Angiosperms is not so clear." Discuss this statement.   *Or,*

Give an account of the history of the female gametophyte of Angiosperms from the megaspore to the completion of the egg-apparatus.

4. Take up one of the following:—

(*a*) Arrange the orders of Monocotyledons in the form of a table, grouping them into subclasses and cohorts; and, in particular, fully characterise the order of Zingiberaceae, trace its affinities to the Marantaceae and Musaceae, and enumerate the species grown for culinary use in Bengal.

(*b*) Characterize the genus Ficus; describe the different kinds of florets which may be found inserted on the receptacle in different species and show how they may be made use of in dividing the genus into well-defined sections. Enumerate the species of Ficus indigenous in the plains of Bengal.

(*c*) Describe the various forms of tendrils and of the androecium in Cucurbitaceae, illustrating them by diagrams, and explain their morphological nature. In particular, refer to the androecium of such species as *Lagenaria vulgaris* Sen. or *Cucurbita Pepo* Linn., and give a list of the species of .Bengal Cucurbitaceae the fruits of which are used as vegetables.

BOTANY.

Third Paper.

Examiners— { S. C. Mahalanobis, Esq., B.Sc., F.R.S.E.
 S. C. Banerjee, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

1. What do you understand by distribution of plants in time ? What are the agents which have been at work in recording such distribution? Describe the various processes of recording.

2. In the tertiary era a sudden change in the vegetation is noticed. Describe the nature of vegetation on the surface of the earth previous and subsequent to that era, and point out what is suggested as to the ancestry of the spermaphytes of to-day.

Or,

"Gymnosperms are more primitive land plants than Angiosperms." Explain this from fossil evidence and from morphological differences between the two.

3. What is the present state of our knowledge regarding the manner in which proteid arises from the products of assimilation in the plant body ?

4. Criticise the theories advanced by Berthold and Bütschli respectively as to the cause of protoplasmic movements, e.g. those exhibited in a plasmodium.

Or,

Give an account of the investigations on the mechanism of nyctitropic movements.

BOTANY.

Fourth Paper.

Examiners— { S. C. Mahalanobis, Esq., B.Sc., F.R.S.E.
{ J. C. Nag, Esq., B.Sc.

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

1. Discuss the position of rest in plants in response to Gravity, and also state the nature of the structural elements responsible for the reception of this particular stimulus.

2. Compare the different views that are prevalent regarding the anatomy of the Chlorophyll Capsule. Discuss the structure of the chloroplasts in Spirogyra, Chadophora and Anthoceros. State why the fragmentation of the chromatophores has taken place in case of higher plants.

Or,

Discuss fully the structure and function of the latex conducting tubes and cells. Cite experimental evidence in support of the view you hold as to the function of this particular tissue.

3. Describe the electrical changes that take place in a living plant tissue when subjected to some form of stimulus.

4. Give an account of the dermal system in the thallophyta, with special reference to the histology of the dermal tissue found among the lichens.

Or,

Discuss the general characters of haustorial organs of embryos and describe the histology of the structures you mention.

BOTANY—PRACTICAL.

First Paper.

1. Give a complete description of one of the dried and one of the 80 fresh specimens, and a description of the inflorescences, flowers, fruits and seeds of the other two specimens. Point out which of the characters are probably ordinal, which generic, and which specific.

Make neat drawings of the parts of the flowers, of the fruits and seeds, and name the specimens.

2. Submit your note-books, accounts of excursions and dried   20 specimens collected by you.

BOTANY—PRACTICAL.

SECOND PAPER.

1. Work out in detail the morphology of specimen A. Identify   40 and give reasons for your answer. Leave slides in support of your answer.

2. Work out the morphology of specimens B and C. Is there any   50 biological connection between the two ?

3. Oral.   10

BOTANY—PRACTICAL.

THIRD PAPER.

1. Devise an experiment to show whether both surfaces of a leaf transpire equally.

2. Determine the percentage of organic matter in the soil provided.

3. Demonstrate the process of cell-to-cell osmosis in vegetable tissues.

4. Instruments and oral.

BOTANY—PRACTICAL.

FOURTH PAPER.

The figures in the margin indicate full marks.

1. Prepare permanent slides from specimen A to show the develop-   30 ment of spores. Write notes and give sketches.

2. Cut transverse sections of specimens B and C. Stain and mount   30 in Canada balsam. Identify the specimens from your sections, giving reasons.

3. Demonstrate the use of Cambridge Rocking microtome.   20

4. Produce for examination your record of embryological and   20 other microscopic work done by you during the course of your study.

PHYSIOLOGY.

FIRST PAPER.

Examiner—RAI BAHADUR DR. UPENDRANATH BRAHMACHARI, M.A., M.D., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

All questions are of equal value.

1. Discuss the mechanism of oxidation in the tissues and write a note on purine metabolism.
2. Give an account of the variations that may take place in the venous pulse tracing, and write a note on the excitation wave in the heart.
3. Write a careful note on the estimation of the non-protein nitrogen of the blood. How would you estimate the amino-acids of the blood ?
4. Discuss the relationship of the Pituitary and Suprarenals to the Genital System and Carbo-hydrate Metabolism.

PHYSIOLOGY.

SECOND PAPER.

Examiner—RAI BAHADUR DR. U. N. BRAHMACHARI, M.A., M.D., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

THREE *questions only are to be answered.*

1. Discuss critically Sherrington's conception of a " Synaptic membrane." Discuss in detail the various theories of Inhibition.
2. Give an account of our knowledge regarding " conditioned " as differentiated from " unconditioned " reflexes.
3. Write an essay on the nervous mechanism of secretion.
4. Write a dissertation on the structure and functions of the cerebrum, referring particularly to the history of the investigations made in this connection.

PHYSIOLOGY.

THIRD PAPER.

Examiner—S. C. MAHALANOBIS, ESQ., B.Sc., F.R.S.E.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only THREE *questions are to be answered.*

The questions are of equal value.

1. Criticise the general principles involved in the experimental meth
ods adopted for the verification of Weber's law and Fechner's corollary
2. Discuss the functions of the different structures in the Cochlea with
special reference to its use as a resonating apparatus. Explain the
sensations of harmony and dissonance.
3   Compare the dioptric apparatus in the eye of a land animal with
that of an aquatic animal, with special reference to the respective way-
of effecting accommodation to near or distant objects
4. Discuss the doctrine of specific nerve energy with special reference
to the cutaneous sensations.

PHYSIOLOGY.

FOURTH PAPER.

Examiner—N. C. BHATTACHARYYA, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only THREE *questions to be answered.*

The questions are of equal value.

1. Discuss the rôle of fat in the vital phenomena.
2. Give an account of the various theories and facts concerning the
formation and the destruction of purine derivatives in the living
organism.
3. Give an account of the isolation, constitution and importance of
Tryptophane.
4. Trace the development of the modern theory of protein metabolism

GEOLOGY.

FIRST PAPER.

Examiners— $\left\{\begin{array}{l}\text{G. D. COTTER, ESQ.}\\\text{H. C. DAS GUPTA, ESQ., M.A.. F.G S.}\end{array}\right.$

All questions carry equal marks.

FIRST HALF.

Only THREE *questions are to be answered from each half.*

1. It has been said that earthquakes are related to one or both of the two processes of folding and faulting. From this point of view discuss the causes and any peculiarities in the earthquake maps of the Assam Earthquake of 1897, the Kangra Earthquake of 1905, and the Burma Earthquake of 1912.

2. Write an essay upon quaternary earth movements and warping of the land in India and Burma. What evidences have we of
    (*a*) Raised beaches.
    (*b*) Submergences of the coast,
    (*c*) Changes in river courses,
    (*d*) Abnormal distribution of alluvium in river valleys, in India and Burma ?
Are there any estuaries in India? What conclusion can we draw from the evidence in our possession ?

3. Explain how the solid ice of a glacier is able to flow down a valley. What is an ice-cascade ? Distinguish between the névé and· the glacier tongue, and explain how the bergschrund is formed.
    Icebergs from the South Polar continent consist of névé ice, while those from Greenland are of blue glacier ice. Why is this ?

4. Explain the conditions under which were formed the following :--
    (*a*) Silicified fossil wood in the Irrawaddy Series,
    (*b*) Green earth in the Deccan Trap,
    (*c*) Nodules of marcasite in alluvium,
    (*d*) Kankar in the older alluvium.

5. Discuss the origin of the various lakes of India and Burma, as for instance the Kumaon lakes, the Lonar lake, the lakes opposite Monywa in the Lower Chindwin district, and the Chilka lake, and any others you may recollect.

SECOND HALF.

Only THREE *questions are to be attempted.*

1. Discuss the origin of the different oxides of aluminium that are known to occur in India, together with their distribution. •

2. Describe the various ways in which the secondary enrichment of mineral veins may be brought about.

3. (*a*) How does *cassiterite* occur in nature ? Give an account of the tin ore deposits of India.
    (*b*) Describe the different purposes for which pigments are used. Enumerate the different minerals necessary for the manufacture of the various types of pigments and mention those of them that are known to occur within India.

4. Enumerate the different indications you think favourable for the occurrence of mineral-oil deposits   Discuss the possibility of getting good supplies of mineral-oil in North-Western India.

5. What are the conditions essentially necessary for an *artesian well*? Point out the advantages in irrigation by means of the artesian wells and give a general survey of the artesian conditions as they prevail in the different provinces of India.

GEOLOGY.

SECOND PAPER.

Examiners— $\left\{ \begin{array}{l} \text{SARATLAL BISWAS, ESQ., M.SC.} \\ \text{E. VREDENBURG, ESQ., B.SC.} \end{array} \right.$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Only THREE *questions to be answered.*

1. Discuss the various hypotheses propounded to meet the non- 16
conformity of the usually accepted formulas of the end members of
the Sodi-Calcic Feldspars or of the Scapolite group with the theory
of isomorphism as enunciated by Mitscherlich.

2. Explain, by Roozeboom's curve, the development of Zonal and 16
Hour-glass structures in minerals.

3. (a) Give an account of the distribution and uses of the minerals 18
of the rare metals found in the Indian Empire.

(b) Write short notes on—Christobalite, Carnegieite, Pseudo-
Wollastonite, and Clino-Enstatite.

4. Explain how the Isochromatic curves of equal retardation and 16
the Isogyres are formed in sections of Biaxial crystals cut perpendicu-
lar to the first Median line.

5. (a) Describe, with pencil drawings, the crystallographic fea- 16
tures of Orthoclase, Calamine, and Stilbite.

(b) Give the chemical composition and crystalline form of Hol-
landite, Polybasite, Wulfenite, and Sylvanite.

SECOND HALF.

Only THREE *questions to be answered.*

All the questions carry equal maximum marks.

6. Enumerate and describe briefly those rocks which contain
from 55 to 65 per cent. of silica, together with 20 per cent. or- more
of alumina, the remainder consisting principally of alkalies.

7. Tabulate the commonest forms of igneous rocks occurring in
India.   Give an idea of their distribution and relative importance.

8. Give an idea of the mode of occurrence of diorites, their degree of frequency, and their distribution in the world in general, and particularly in India.

9. Describe some instances of the transformation of amphibole into pyroxene in the case of Indian granulites.

10. Do you consider that there is any essential difference between an acid pegmatite and a coarse-grained granite ? According to whichever view you adopt, explain the mutual relations or distinctions between both classes of rocks.

GEOLOGY.

THIRD PAPER.

Examiners— { E. VREDENBURG, ESQ., B.SC.
H. C. DAS GUPTA, ESQ., M.A., F.G.S.

Candidates are required to give their answers in their own words as far as practicable.

Only THREE *questions to be answered from each half.*

All questions carry equal marks.

FIRST HALF.

1. How would you ascertain whether an observed sequence of rocks may or may not belong to the type of displaced masses known as " charriage."

2. Describe the structure and discuss the stratigraphical relationships of the khondalites.

3. Discuss in detail the character by means of which it may be possible to ascertain whether an observed sequence of beds in India is referable rather to the Newer than to the Older Transitions, or *vice versa.*

4. Which rocks, in the Indian region, are regarded as referable to the Jurassic system ? Briefly enumerate their characters.

5. How many periods of igneous activity are recognisable in the geological history of India ? Describe briefly the characters of each of them.

SECOND HALF.

N.B.—THREE *questions are to be attempted.*

1. Give an account of the important contributions that have been made to Palæobotany in the present century.

2. (a) Give an account of the Rajmahal cycads.

   (b) What are coal-balls ? Describe their origin and distribution.

3. Give an account of the *Ammonites* that have been found in the Permian and Triassic beds of India.

4. (a) Give an account of the reptilian fossils that have been found in India.

   (b) State all that you know of the eocene mammalian fauna of Burma.

5. Give an account of the Siwalik *Giraffidæ* and *Hippopotamidæ* and point out the light they throw on the evolution of these two families.

GEOLOGY.

FOURTH PAPER.

Examiner—DR. H. H. HAYDEN, C.I.E., D.Sc., F.R.S.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Only FOUR *questions to be attempted; viz.* 1, *either* 2 *or* 3,
either 4 *or* 5, *either* 6 *or* 7.

1. Explain the bearing of Laue's X-ray photographs of crystals   30
on the theory of crystal structure.

2. Describe and *explain* the phenomena observed in a plate of a   20
uniaxial crystal, cut at right angles to the axis, when viewed be-
tween crossed nicols in convergent polarised monochromatic light.
Illustrate your *explanation* by means of a diagram.

Or,

3. What are *Airy's Spirals*? Explain the reasons for their pro-   20
duction.

4. What do you understand by the term *petrographical province*?   20
Illustrate your answer by a description of one such province with
which you are familiar.   *Or,*

5. Discuss the petrography and history of the Dharwar system of   20
Southern India.

6. How would you determine the orientation of the clinopinacoid   20
and of the unit prism in a crystal of mica of which you had only a
basal cleavage plate showing no crystal edges ?

Or,

7. Give the chemical composition, crystallographic and optical   20
properties of chondrodite. Name two other minerals belonging to
the same group.

GEOLOGY—PRACTICAL.

SPECIAL PAPER IN MINERALOGY AND PETROLOGY.

This powder has been produced by crushing and powdering a certain
rock, and then passing the powdered rock through a sieve with medium-
sized meshes. The rock is a peculiar one, consisting mainly of two
minerals, one of which is greatly preponderating. There are also certain
impurities present.

You are to find out the composition of the rock, and to name the two
minerals of which the rock mainly consists.. In naming the rock, you
must endeavour not only to give the general name of each mineral, but
as far as you can to give the name of the variety.

EXPERIMENTAL PSYCHOLOGY.

FIRST PAPER.

Examiners— { S. C. MAHALANOBIS, ESQ., B.SC., F.R.S.E.
DR. N. N. SENGUPTA, M.A., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Full marks—50.

Only THREE questions to be answered.

The questions are of equal value.

1. Discuss the arguments that have been adduced in support of the existence of "Association centres" (Flechsig's) in the cerebral cortex.
2. Criticise from the psychological side the results of Head's researches on protopathic and epicritic sensibility.
3. The cerebellar cortex has been stated to be a supreme centre on the sensory side. Examine this statement from a psychological standpoint.
4. Give a critical and comparative estimate of the influence of Weber, Herbart, Fechner and Wundt on the growth of the "new" psychology.
5. Give a psychophysical analysis of the various phases of the speech function.

SECOND HALF.

Full marks—50.

Not more than THREE questions to be answered.

Questions carry equal marks.

1. Comment on three of the following in the light of experimental and observational evidence:—

   (i) Attention consists in the increase of intensity of sensations.

   (ii) Emotion is produced by thinking.

   (iii) There is no clear proof at all of reproduction by similarity or contrast.

   (iv) The law of association in its most general form asserts that two ideas, a and b, under certain circumstances, connect with one another in such a way that the appearance of one of them, a, affects the reproduction of the other, b.

   (v) $S_1 - S_2 = f\left(\dfrac{R_1}{R_2}\right)$

   $S_1 - S_3 = f\left(\dfrac{R_1}{R_2}\right) + f\left(\dfrac{R_2}{R_3}\right)$

and also $$S_1 - S_3 = f\left(\frac{R_1}{R_3}\right)$$

$$= f\left(\frac{R_1}{R_2} \times \frac{R_2}{R_3}\right)$$

therefore, $$f\left(\frac{R_1}{R_2}\right) + f\left(\frac{R_2}{R_3}\right) = f\left(\frac{R_1}{R_2}\right) \times f\left(\frac{R_2}{R_3}\right)$$

Hence, $$S_1 - S_2 = C \log \frac{R_1}{R_2}$$

$$S_1 - S_0 = C \log \frac{R_1}{R_0}$$

therefore $$S = C \log R.$$

2. Describe the "Gradation methods" in their application to the determination of RL and DL of a specific sensation.

3. Discuss two of the following :

(a) Fechnar's method of eliminating the constant total error of time and space order of Stimuli.

(b) The principle of time-control in Psychological experiments.

(c) The different methods of reducing Qualitative experiments to Quantitative ones.

4. Critically examine the theories of "Sensory fusion" as enunciated by Herbart, Lipps, Stumpf and Wundt.

5. Critically examine the doctrine of psychic causation with special reference to the following :—

(a) The doctrine of the Subconscious.

(b) The concept of elementary will quality.

(c) The concept of mental activity.

(d) The postulate of parallelism.

EXPERIMENTAL PSYCHOLOGY.

SECOND PAPER.

Examiners— { DR. B. C. GHOSH, M.A., M.B.
              { DR. G. S. BOSE, M.SC., M.B.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

*Full marks—*50.

Try ANY THREE.

The questions are of equal value.

1. Discuss the abnormality of :—

(a) The only child.

(b) The miser.

(c) The kleptomaniac.

(d) The malingerer.

2. Write short notes on any *four* of the following :—

    (*a*) Prison Psychosis.
    (*b*) Day-dreaming.
    (*c*) Familial constellation.
    (*d*) Freud's Theory of Wit.
    (*e*) Bergson's Theory of Art.
    (*f*) Auto-eroticism.

3. Write short accounts of the Insanities that most frequently lead to crime.

4. Give an account of the theories of crime and of the psycho–analytic study of antisoniel behaviour.

5. Discuss the therapeutic action of psycho-analysis and the consequences of the assimilation of the unconscious.

6. Develop Jung's view of the compensatory function of the unconscious, referring specially to psychological types.

SECOND HALF.

Only THREE *questions to be answered.*

All questions carry equal marks.

1. Write a short history of *hypnotism*, noticing briefly the various theories on the subject.

2. What is *mono-ideic somnambulism* ? How has this phenomenon been explained (1) by Janet and (2) by Freud ?

3. Write short notes on (1) *complex formation*, (2) *dissociation*, (3) *conservation*, (4) *automatism*, (5) *symbolisation*, (6) *perversion*, (7) *inversion*, and (8) *conversion*.

4. Discuss the mental peculiarities of the *hysteric*.

5. Describe briefly the various types of *amnesia* and explain their mechanisms.

6. Describe the influence of *internal secretions* on mental states.

EXPERIMENTAL PSYCHOLOGY.

THIRD PAPER.

Examiners— $\begin{cases} \text{K. N. MITTER, ESQ.} \\ \text{M. N. BANERJEE, ESQ., M.SC.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt Question 1 and TWO *others.*

FIRST HALF.

1. What rôle do the following physio-biological factors play in the   20 determination of the behaviour of Queen and worker ants :—

    (1) Heredity and instinct.
    (2) Structural polymorphism.
    (3) Ontogenic factors.

2. What are the important structures and functions that condition   15
the perception of distance in human beings ?   Point out the analo-
gous structures and functions in the case of lower organisms.

3. Discuss :—   15

(1) The ' Local Action Theory ' of tropism as expounded by
Jennings.

(2) Reactions of the following organisms to photic stimulation :—
Amoeba, Paramoecium, Hydra, Sea-anemone, Medusae, Gonio-
nemus, and Cubomedusae.

Trace the evolution of the light-receiving organ in the above-
mentioned organisms.

4. Comment on the following :—   15

(1) Schiller-Spencer theory of play.
(2) Karl Groos' theory of play.
(3) How bees find their way home.
(4) Sanguinary and ' Slave-making ' instinct of Formica san-
guinea.
(5) How bees recognize nest mates.
(6) The chemical sense in earthworms.

5. Explain the origin of sexual impulse according to the Weisman-   15
nian theory of ' Caryogamic Rejuvenescence.'   Confirm your state-
ments by citing well-known biological phenomena.

6. Describe the behavioristic peculiarities of the Japanese ' Dancing 15
Mouse.'   How would you account for them ?

7. (1) Show the evolution of visual apparatus starting with the   15
Amphioxus.   How would you account for your answer in view of the
inheritance of the effects of use and disuse ?

(2) Explain the formation of mosaic vision, and describe the
structure of the eye possessing such vision.

Second Half.

You are not permitted to attempt more than THREE *questions.*

All questions are of equal value.

1. Give a short account of Sherrington's work on various types
of reflexes and their bearing on the evolution of intelligence.

2. Trace the evolution of the herd instinct in the animal kingdom
and dwell on the biological and psychological aspects of the same.
Discuss the position of the individual in the herd.

3. Write a note on the life-history and behaviour of any *two* of
the following :—A frog, a butterfly, and a bee.

4. Comment on the significance of imitation as a factor of men-
tal development in the animal kingdom.

5. Discuss the limits of educability in animals.

6. Contrast the psychic life of higher apes with that of man.

7. Write a short essay on memory in animals.

8. Explain and discuss any *one* of the following :—

(a) " Feeling has relations to instruct as obvious and funda-
mental as are the analogies between intellectual processes and reflex
action."

(b) " Resultant singleness of action from moment to moment is
a key-stone in the construction of the individual whose unity it is
the specific office of the nervous system to perfect."

EXPERIMENTAL PSYCHOLOGY.

Fourth Paper.

Examiners— { Dr B. N. Seal, M.A., Ph.D.
{ H. Bhattacharyya, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

All the questions are considered as of equal value.

First Half.

Full marks—50.

1. Represent by diagrams the supposed paths and connections of speech centres, and support the scheme you prefer by references to the imperfections of children's speech as well as to the disturbances of speech in adults.
Or,

Trace the development of speech in children with special reference to the following :—

(a) the use of articles, pronouns, adjectives and conjunctions ;
(b) the formation of clauses and sentences ;
(c) the use of the interrogatives, ' what,' ' why ' and ' when.'

2. Trace the development of the Will from a basis of reflex, instinctive and expressive movements, as illustrated by (1) seizing, (2) walking.

Or,

Examine the more important theories of Instinct, and apply the one you prefer to the explanation of any two of the following :—(a) the instinct of play, (b) the instinct of jealousy, (c) the instinctive fear of open places.
Or,

Examine the moral nature of children with special reference to—

(a) their falsehoods, their cruelty, and their selfishness ;
(b) their judgments of right and wrong ;
(c) their attitude towards punishment.

3. Give a general view of the results of the experimental study of children, with reference to the following :—

(a) the curves of practice, of learning and forgetting, and of fatigue ;
(b) children's memory and children's interests.

Note under (b) the order of development and the differences of sex and age.
Or,

Describe the changes due to adolescence in the physical and mental life of children, and discuss them in the light of psycho-therapy, with special reference to the influence of hormones and glandular secretions.

SECOND HALF.

The figures in the margin indicate full marks.

1. Discuss the etiology of mental deficiency in children with spe-   16
cial reference to heredity.
<div align="center">Or,</div>

Discuss the psychological principles on which the education of the
blind, the deaf and the deaf-mute is based.

2. Compare ancient and modern educational methods with refer-   16
ence to—

    (*a*) mental types,
    (*b*) children's interests,
    (*c*) courses of study, and
    (*d*) punishment.
<div align="center">Or,</div>

Discuss fully the problem of Co-education with special reference to
the mental make-up of the sexes.

3. In what respects does the ' Children's House ' of Montessori   15
differ from the ' Kindergarten ' of Froebel ?   What aspect of
children's mind is emphasised in each ?
<div align="center">Or,</div>

Give a critical estimate of Rousseau's Emile, examining its main
principles of education.
<div align="center">Or,</div>

Write a short essay on Exceptional Children.

EXPERIMENTAL PSYCHOLOGY—PRACTICAL.

PAPER V.

1. Obtain a campimetric record of your left eye for green   10 + 6
along a meridian passing through the blind spot.
Indicate how this record may be transferred to a perimetric
chart.

2. Find the " time of lag " of the sensation of a White over a   10 + 6
Black.

3. Illustrate graphically the variation in the frequency of   10 + 6
vibration of the tuning fork provided, due to the sliding of the rider
through a given range.

4. Demonstrate the " Summation effect " on a touch spot.   10 + 6

5. Find the " choice " and the " Discriminative " reaction   12 + 8
times in 0 of your subject, using light and sound as stimuli.

6. Viva Voce.   16

EXPERIMENTAL PSYCHOLOGY—PRACTICAL.

PAPER VI.

Answer any TWO *of the following five questions, and nos. 6 and 7.*

1. Demonstrate the effects of accommodation of visual attention.	35
2. Demonstrate the phenomenon of fluctuation of visual attention.	35
3. Demonstrate the dynanogenic effect of auditory sensations.	35
4. Demonstrate the difference between sensory and muscular re-	35
action.	
5. Determine the image type of your subject.	35
6. Demonstrate the uses of the instruments A and B.	14
7. Viva Voce.	16

EXPERIMENTAL PSYCHOLOGY—PRACTICAL.

PAPER VII.

1. Obtain the simple reaction of your subject by the graphic method.

2. Demonstrate graphically the influence of affection on muscular fatigue.

3. Represent, by the graphic method, how emotional changes find expression in organic movements.

4. Viva voce.

EXPERIMENTAL PSYCHOLOGY—PRACTICAL.

PAPER VIII.

(*Marks will be awarded for methodical work and for neatness of record. Candidates should excercise their own discretion as to the number of observations required in any experiment, but in no case need the number exceed* 20. *Tables for constant will be supplied where necessary.*)

1. Devise an experiment (excluding the use of the colour-wheel) 28 to determine the D.L. for brightness of Light.

Or,

Devise an experiment to demonstrate the method of Average Error, and plot out a frequency curve of the variable. Indicate the methods of determining the mean, the median, the mode, the standard deviation and the probable error of the values obtained.

2. Find the upper D.L. for any sensation by the method of Just 28 Noticeable Differences.

Or,

Find the lower limit of simultaneous discrimination of 2 points on any portion of your subject's skin by the Method of Right and Wrong Cases.

3. Set up the Vibrating Spring Time Marker accurately to indicate 16 0·25 sec.

4. Open a page of your note-book. Concentrate your attention on 12 a letter by looking at it steadily, and give a detailed introspective record of the attentive consciousness.

5. Viva voce. 16

𝕷.𝕿. 𝕰xamination.

1918.

FIRST PAPER.

THE THEORY AND PRACTICE OF TEACHING IN RELATION TO MENTAL AND MORAL SCIENCE.

Examiner—M. P. WEST, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

Do the FIRST question, and FOUR others.

Each question counts for twenty marks.

1. Was the teacher right or wrong ? Why ?

(a) " I want you to make a box. First I shall tell you how to do it. Then I shall draw a picture. Then we will go to the workshop."

(b) " I am trying to train you to habits of punctuality, but for this once I will make an exception."

(c) " Write out the poem which you have to repeat to-morrow. That will help you to learn it."

(d) " Now I shall do an experiment to show that metal expands when heated."

(e) A Time Table.	Another Time Table.
1st Period.	1st Period—Interval 5 mins.
2nd ,,	2nd ,, — ,, 10 mins .
3rd ,,	3rd ,, — ,, 15 mins.
Interval 25 minutes.	

Which is more correct, and why ?

2. What is known of the Psychology of Memory ? Give practical advice. By what means were the facts of memory investigated ?

3. Discuss and illustrate the main characteristics of a child's attention.

4. Outline the main stages of mental development.

5. What is an instinct ? Enumerate the main instincts. Discuss the training of instincts.

6. Apply psychology to the teaching of *either* Number *or* Bengali Composition and Essay-writing.

7. Give practical applications of the psychology of Fatigue to school work, explaining the causes and types of fatigue.

SECOND PAPER.

METHODS OF TEACHING SPECIFIC SUBJECTS AND SCHOOL MANAGEMENT.

Examiner—W. E. GRIFFITH, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

All the questions are of equal mark value.

SIX *questions to be answered, of which three must be answered from Section A, and three from Section B.*

A.

1. State clearly what you mean by the organization of a school.

2. What are the chief points to be considered in the preparation of a lesson ? Illustrate from your own experience.

3. Consider the chief uses of the blackboard in class teaching. Illustrate from lessons which you have either given or observed.

4. State the principles which should guide a teacher in planning a time-table for a high school of Bengal. Illustrate your answer by drawing up a time-table for one week for one of the classes.

5. "A school library should be of real use." Say what types of books you would include in the library, and suggest any ways of making such a library of interest and value to the staff and students.

6. State and discuss the plans which you would adopt for fostering the social spirit in schools.

B.

7. Describe some of the ways by which the teaching of English in the high schools of Bengal might be improved ; and suggest plans which you would carry out if opportunity were given.

8. Why is dictation included in the school curriculum ? Give in detail the steps which you considered it necessary to take in order to secure its greatest value.

9. Sketch briefly the methods which you would employ in helping children to read intelligently.

10. By what method would you begin to teach Long Division in Arithmetic ? Give reasons.

11. What use would you make of the following in teaching geography :—

    (*a*) Literature of travel and exploration.
    (*b*) Class Text-books.
    (*c*) Globes.
    (*d*) Photographs.
    (*e*) School Journeys.

12. Of what value are Nature Calendars to school children ? Would you prefer the individual child's calendar or a class calendar ? State the reasons for your opinion.

<center>THIRD PAPER.</center>

<center>SELECTED EDUCATIONAL CLASSICS.</center>

<center>*Examiner*—H. A. STARK, ESQ., M.A.</center>

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. What qualifications do Thomas Arnold and Locke respectively   9
desire in a teacher ?   Account for the variations in their ideals of a
teacher.

<center>*Or,*</center>

What do Arnold and Locke respectively consider to be the proper
and ultimate ends of education ?

2. Discuss according to Locke the advantages and disadvantages   9
of education at home and at school.   In what points may Arnold be
supposed to agree with, and differ from, Locke upon this subject ?

3. What did Arnold hold to be the peculiar functions of the Sixth   8
Form in the corporate life of an English public school ?   Explain the
means by which he aided that Form to discharge those functions.

4. Describe the "fag" system of an English public school, and   8
dwell on its good and bad features.

<center>*Or,*</center>

Describe the "house" system as it was organized by Arnold at
Rugby, and indicate how it influenced the lives of the boys in that
school.

5. According to Locke what moral injury does the *fond* (as distin-   8
guished from the *affectionate*) parent do his child of tender years ?
What measures has such a parent to employ later on to mitigate the
evil consequences of his early "fondness" ?   Does Locke's censure
of the "fond parent" apply to the average home in your part of India ?

6. Describe the reading-games by which Locke would have children   8
taught reading.   Can his reading-games be adapted to the teaching
of reading in the vernacular languages of India ?

7. Write an Essay on *any one* of the following subjects :—   50

(*a*) The loyalty of the peoples of India to the King-Emperor as
evinced in the present war ;

or (*b*) The actual functions and value of public examinations ;

or (*c*) The reaction of their environment upon the moral, intellectual.
and physical culture of schoolboys in Bengal.

FOURTH PAPER.

A SELECTED COURSE IN MODERN ENGLISH PROSE AND POETRY.

Examiner—J. W. HOLME, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

TWO *questions from each section to be answered.*

A.

1. Describe in your own words the adventures of Lady Clare during the battle of Flodden.   25

2. Give a short character-sketch of Marmion.   25

3. Write a short account of old English Christmas festivities.   25

B.

4. Mention some of the abuses of the English poor-law system with which Dickens deals in *Oliver Twist*.   25

5. "Dickens is more successful in delineating characters from low life than from high." Can you justify this ?   25

6. Write a brief account of the part taken by Nancy in the story.   25

𝔅.𝔗. 𝔈xamination.

1918.

1. Write a description, physical and mental, of any child whom you know well, mentioning his special interests, and mental abilities, his special powers and defects, mental and physical. Estimate the relative importance of heredity and environment in producing his present make-up.

2. You are asked to make a study of the comparative ability in Rote-memory of Indian and English boys. Describe your apparatus, methods, and state how you would express your results.

3 Describe the nervous system and its working. Use plenty of diagrams. How far is the doctrine of Faculty true? How far are functions localised as was maintained by the Phrenologists?

4. Discuss the Psychology of Reading.

5. Apply the Psychology of Sentiments to the training of character.

6. Enumerate all the Sensations. Give advice on the hygiene of the external sense-organs.

7. Expound the psychology of Skill and Habit.

8. Discuss the theory of the physical basis of Emotions, and its practical application, the relation of Emotion and Instinct. Explain Freud's doctrines regarding suppressed emotions and their educational importance.

Second Paper.

METHODS OF TEACHING SPECIFIC SUBJECTS AND SCHOOL MANAGEMENT.

Examiner—W. E. Griffith, Esq., M.A.

Candidates are required to give their answers in their own words as far as practicable.

All the questions are of equal mark value.

Six *questions to be answered, of which two must be taken from Section A, and four from Section B.*

A.

1. "Examinations should not only be a test of knowledge acquired : they should also be an integral part of teaching and mental training." Discuss and illustrate this statement.

2. Describe the structure and arrangement of the seating accommodation which you consider most suitable for the class-rooms of a high school of Bengal. Add what is necessary about the size of the school and its classes, the age of the scholars, and the dimensions of the rooms.

3. What actual difficulties of class management have you experienced ? In what ways has your course of training been helpful to you in overcoming them ?

4. Discuss the value of the physical exercise and mental training which can be derived from the various games commonly played by schoolboys in Bengal.

5. What are the advantages and disadvantages of class teaching as compared with private tuition ? What private tuition does a boy who attends a high school require ?

B.

6. What is your general plan for teaching written composition ? What use do you make of oral methods in connection with such lessons ?

7. With which class would you begin the teaching of formal grammar ? What attainments in the subject would you expect of an intelligent boy when he leaves school at the age of sixteen ?

8. The old method of teaching geography consisted largely in memorising lists of names of places, many of which were of little importance. How do the newer methods of teaching geography attempt to avoid this condition of things ? Give instances.

9. Give an outline of a first course of lessons in fractions in Arithmetic. What concrete and graphical illustrations would you use ?

10. What are the general principles which underlie the teaching of drawing in schools ? What use should the teacher make of the blackboard ?

11. To what extent can the heuristic method be used in the teaching of science ? Illustrate your answer by reference to some particular lesson which you have either given or observed.

12. Choose a period of Indian history, and show how you would arouse a preliminary general interest among your pupils in the period as a whole.

54

THIRD PAPER.

HISTORY OF EDUCATIONAL IDEAS AND METHODS.

Examiner—E. E. BISS, ESQ.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. Estimate the importance of the place given to discipline in the 20
education of the ancient Hindu and the mediæval Mahomedan child.
How far does the modern High School provide for discipline in the
old sense ?

2. Explain and discuss the place of Music in the Hellenic systems 20
of education.

<div align="center">Or,</div>

Contrast the education of a Churchman with that of a Nobleman
in mediæval Europe, and discuss the part taken by the Church in
education in those times.

3. Consider the natural reactions theory of punishment as pre- 20
sented by Rousseau and Spencer.

<div align="center">Or.</div>

Expound the Herbartian theory of the formation of apperception
masses, explaining and criticising its educational applications.

4. How far can a science of education be said to exist ? Briefly 20
outline the history of the modern attempts that have been made for
its establishment.

<div align="center">Or,</div>

What man who has flourished in the last 300 years do you consider
to be the soundest guide in forming your own educational practice ?
Give some account of his life and work, indicating his educational
principles, and describing his school practice if he had any.

5. What were the principles and organization of vocational educa- 20
tion in Germany before the war ?

<div align="center">Or,</div>

What part has education played in the regeneration of Japan ?
Describe its organization in that country.

FOURTH PAPER.

SELECTED EDUCATIONAL CLASSICS.

Examiner—W. C. WORDSWORTH, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer questions 1, 7, *and three others.*

The figures in the margin indicate full marks.

1. Annotate in relation to the context *four* of the following:—   20

(a) They are only our own offspring, that we neglect in this
point: and having made them ill children, we foolishly expect they
should be good men. ˙

(b) Forgive me therefore if I say, I cannot with patience think,
that a young gentleman should be put into the herd, and be driven
with a whip and scourge, as if he were to run the gauntlet through
the several classes.

(c) It follows from this that all the untruths spoken by children
are the fault of those who instruct them ; and that endeavouring to
teach them how to be truthful is only teaching them how to tell false-
hoods.

(b) The tranquil period of intelligence is so brief, and has so many
other necessary uses, that only folly imagines it long enough to make
the child a learned man.

(e) Whatever interest he felt in the struggles of the political and
ecclesiastical world, reacted on his interest in the school, and in-
vested it in his eyes with a new importance.

(f) Mere intellectual acuteness, divested as it is, in too many
cases, of all that is comprehensive and great and good, is to me more
revolting than the most hopeless imbecility, seeming to be almost
like the spirit of Mephistopheles.

2. Set out, and discuss, Locke's conception of the gentleman. In   10
what points were his views at variance with the views that prevailed
in his day ?   •

3. Discuss Locke's position in regard to the teaching of languages.   10

4. " Apparent quickness in learning is the ruin of children." Ex-   10
amine this statement with reference to Rousseau's view of the place
of memory in education.

5. Give some account of Arnold's methods of teaching, and dis-   10
cuss the aims which as a teacher he set before himself.

6. What meaning does Rousseau give to ' Nature,' and what is   10
the place of Nature in his theory of education ?

7. Write an essay on *one* of the following subjects:— •   50

(a) The development of ideals as the chief work of education.

(b) The value of direct moral teaching.

(c) The claim of education to rank as a science.

(d) The value to the community of a good system of primary
education.

Preliminary Scientific M.B. Examination.

April, 1918.

CHEMISTRY.

THREE questions only to be answered from each half: the first question in each half is compulsory.

Write the answers to the two halves in SEPARATE books.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—RAI CHUNILAL BASU, BAHADUR, M.B., I.S.O., F.C.S.

1. How is bleaching powder ordinarily prepared ? Give equations. 80
Describe its properties and uses. Name some other substances
which are also used as bleaching agents and explain the mode of action
of each

2. What are the points of distinction between a " mechanical 60
mixture" and a " chemical compound " ? Classify the following
under one or other of the above two heads and indicate how you
would separate the constituents of each :—

(*a*) Gun-powder ; (*b*) Sodium Chloride.

3. Explain the terms " colloids " and " crystalloids." Give exam- 60
ples. Describe the process of separating a colloid from a crystalloid
substance and sketch the apparatus you would use for the purpose.

4. Describe the properties and uses of metallic lead. Explain the 60
action of drinking water on lead. Name the important alloys of which
lead is a constituent.

SECOND HALF.

Examiner—DR. BENIMADHAB CHAKRABARTI, B.A., L.M.S.

5. Describe the preparation, properties and uses of the following 80
substances :—(*a*) Zinc Sulphate ; (*b*) Potassium Bromide ; (*c*) Ammonium Chloride ; (*d*) Borax ; (*e*) Carbon Disulphide.

6. Explain the following terms, giving one example in each case :— 60
(*a*) analysis ; (*b*) empirical formula ; (*c*) water of constitution ; (*d*)
acidimetry ; (*e*) saturated solution.

7.   How would you obtain nitrogen from ammonium nitrite ?   What   60
would be the volume of nitrogen measured at 20°C. and under 740
mm. pressure from 10 grammes of ammonium nitrite ?

8.   Describe the preparation of arsenuretted hydrogen.   What   60
precautions would you take in the preparation of this gas ?   Describe
its properties and show how it can be used as a test for arsenic.

PHYSICS.

Only THREE *questions to be attempted in each half.*

Write the answers to the two halves in SEPARATE *books.*

Sketches should be drawn in pencil.

*Candidates are required to give their answers in their own words
as far as practicable.*

The questions carry equal marks.

FIRST HALF.

Examiner—TULSIDAS KAR, ESQ., M.A.

1.   State Newton's laws of motion and obtain from the second law the
definition of the C.G.S. unit of force.

2.   Define specific gravity.   Explain the method of finding the specific
gravity of a powder insoluble in water, by the specific gravity flask.

3.   State the laws of vibration of stretched string, and describe simple
experiments with the sonometer to verify them.

4.   Define latent heat of fusion of a solid.   Describe the method of
mixture for determining the latent heat of fusion of ice.

5.   State Charles' law on the expansion of gases.

Find the mass of 100 litres of dry carbon dioxide at 30°C and under the
pressure of 780 mm., the mass of 1 litre of hydrogen at N.T.P. being 0·089
gram.

SECOND HALF.

Examiner—NIBARANCHANDRA RAY, ESQ., M.A.

6.   Explain fully how you would determine the relative intensities of
two sources of light, proving any formula that you may use.

7.   Describe any method of finding the focal length of a concave lens.

8.   Explain the difference between the phenomena of *induction* and
conduction in statical electricity.   Explain fully how you would determine
the nature of an unknown charge X with the help of a gold-leaf electro-
scope.

9.   Define volt, ohm and ampere.   Describe the construction and use
of a tangent galvanometer with the help of a neat figure.

10.   Describe the construction and use of Clarke's magneto-electric
machine.

BOTANY.

Answer only TWO *questions in each half.*

The questions carry equal marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

*Examiner—*C. E. CALDER, ESQ., B.SC.

1. Give as full an account as you can of *one* of the following families:—

> Convolvulaceae,
> Apocynaceae,
> Cucurbitaceae.

2. Enumerate the chief characters which are used to distinguish Monocotyledons from Dicotyledons, and discuss the values of these characters.

3. Write a short paper on—

> Vegetative reproduction in higher plants.
>
> *Or,*
>
> Modes of dispersal of seeds and fruits.

SECOND HALF.

*Examiner—*DR. EKENDRANATH GHOSH, M.D., M.SC.

4. Describe the microscopical structure of the leaf of a Dicotyledon. Give drawings.

5. Describe the life-history of Spirogyra. In what way does it differ from Ulothrix ?

6. Trace the course of the transpiration current from the root hairs to the leaf of a plant.

ZOOLOGY.

Only TWO *questions to be attempted in each half.*

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

*Examiner—*S W. KEMP, ESQ.

1. How do the following animals feed ?—*Amoeba, Nyctitheris, Hyrda,* the Cockroach, *Achatina.* Describe the structures concerned. 50

2. Describe the nervous systems of *Achatina, Vino* and *Palaemon.* What special organs of sense are found in these animals ? 50

3. What is the difference between the classes of animals known as Coelomata and Coelenterata ? How is the Coelom developed in the Earthworm and in Palaemon ? 5C

SECOND HALF.

Examiner—DR. EKENDRANATH GHOSH, M.D., M.Sc.

4. Describe the alimentary canal of the Bhekti. Illustrate your 50
answer with a drawing.

5. Describe the red-blood corpuscles of the Bhekti, of *Bufo* and of 50
the Guinea pig. What are the other constituents of blood ?

Describe the development of a vertebrate eye. Illustrate your 50
answer with drawings.

First M.B. Examination.

APRIL, 1918.

ANATOMY.

PASS PAPER.

Only TWO questions are to be attempted.

The questions are of equal value.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—ASST. SURGEON NANILAL PAN, M.B.

1. Describe the sinuses of the Dura Mater.   150
2. Describe the origin, course, relations and branches of the   150
Lingual Artery.
3. Write short descriptions of the following :—   150
Tympanic antrum (Mastoid antrum); Renal fascia; Filtration
angle of the eye ; Ligamentum Denticulatum ; Subsartorial plexus ;
Claustrum.

SECOND HALF.

Examiner—LT.-COL. R. P. WILSON, F.R.C.S., I.M.S.

Only TWO questions are to be attempted.

1. Describe the Ischio-rectal Fossa, giving an account of its   150
boundaries and contents.
2. Describe in detail the Palmar Fascia and contrast it with the 150
Plantar Fascia.
3. Describe the Parotid gland and give its relations; mention   150
the vessels and nerves which are in close relation to it.

ANATOMY.

Honours Paper.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Only two questions are to be attempted from each half.

First Half.

1.	Give a full description of the Urinary Bladder, in the male.	150
2.	Give an account of the relations of the Trachea in the neck.	150
3.	Describe the fourth Ventricle of the Brain.	150

Second Half.

1. Describe the origin, insertion, action and nerve supply of the   150
muscles entering into the formation of the soft palate.

2. What is an Emissary Vein ? Enumerate the Emissary Veins,   150
mentioning their communications.

3. Describe the ossification of the Mandible and the ossicles of   150
the ear.

PHYSIOLOGY.

Pass Paper.

Each question is of the same value.

Only two questions are to be answered in each half.

First Half.

Examiner—Asst. Surgeon Binaylal Majumdar, L.M.S.

1. Draw a diagram showing the histological structure of Testes or
Ovary.

2. Write short notes on the following :—

    (a) Vitamines.
    (b) Heart-block.
    (c) Reaction of degeneration.
    (d) Dicrotic wave.
    (e) Rhodopsin.
    (f) Wissel's granules.

3. Describe briefly the origin and destination of—

    (a) bile-pigments.
    (b) bile-salts.
How would you detect their presence in the urine ?

SECOND HALF.

Examiner—MAJOR D. McCAY, M.B., I.M.S.

4. Discuss briefly the evidence for the difference in function of glomerular and tubular epithelium of the kidney.

5. How is the normal temperature of the body maintained ?

6. Define carefully the anatomical limitations of—

a) upper motor neuron ;

(*b*) lower motor neuron.

PHYSIOLOGY.

HONOURS PAPER.

Candidates are required to give their answers in their own words as far as practicable.

Each question is of the same value.

Only TWO questions are to be attempted from each half.

FIRST HALF.

1. What are Hormones ? How do they differ from enzymes ? Enumerate the important hormones in the human body, noting against each its specific action.

2. Draw a diagram showing the structure of the cochlea, and trace carefully the path of an auditory impulse, as it travels from the internal ear to the cortex of the brain.

3. Give a brief account of the origin and significance of purin bodies : mention some ordinary articles of diet which are rich in purins.

SECOND HALF.

4. Discuss in detail the " alkalinity of the blood."

5. Discuss the physiological explanations of the different forms of cardiac arrhythmia.

6. Discuss the " so-called defects of an ordinary Bengali diet. How would you remedy them ?

PHARMACOLOGY.

Pass Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

First Half.

Examiner—Lt.-Col. B. H. Deare, M.B., D.P.H.,
M.R.C.S., I.M.S.

1. What is Pitutarin ? Discuss its action and therapeutic uses.   100
2. Discuss the influences which modify the action of Morphine.   100
3. What do you understand by the terms Ecbolic and Emmena-   100
gogue ? Classify them.

Or,

Discuss the action and therapeutic uses of Magnesium Salts.   100

Second Half.

Examiner—Dr. Bidhanchandra Ray, B.A., M.D.,
F.R.C.S, M.R.C.S.

4. What is Thymol ? Give its pharmacological action and thera-   150
peutic uses, indicating the special precautions, if any, to be taken
in its use.

5. Give the preparations from Belladonna Radix, and their doses.   150
Describe the toxic effects of Belladonna.

Or,

What are the different methods of introducing Hydrargyrum   150
into the system ? What preparations and precautions are advised
for each method.

PHARMACOLOGY.

Honours Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

First Half.

1. Discuss the therapeutic uses of Saline Infusions.   150
2. What is the Ionic Theory ?   Discuss its importance to Pharma-   150
cology, and give evidence in support of this theory.

Second Half.

1. What is an Antidote ?   Give antidotes for the following drugs,   150
explaining in detail their mode of action :—

        (a) Opium.   (c) Zinc Salts.
        (b) Strychnine.   (d) Mercurial Salts.

2. Classify Emetics with reference to their mode of action.   150
Explain in detail how the different groups act.

ORGANIC CHEMISTRY.

Write the answers to the two halves in separate *books.*

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

First Half.

Examiner—Rai Chunilal Bose, Bahadur, M.B., I.S.O.,
F.C.S.

Answer Question 1 and two of the other three questions.

1. Describe briefly the various methods employed for the purifica-   40
tion of an organic compound before it is submitted to ultimate analy-
sis, and state how you would test for its purity.
2. How would you ordinarily prepare the following substances ?   30
State their properties and uses :—

    (a) Ether ; (b) Phenylamine ; (c) Dextrin ; (d) Picric Acid. -

3. What is Petroleum, and what is its chief source ?   Name the   30
principal constituents of the crude substance ; state how they may
be separated and indicate the uses of each.

4. Give the formula and one chemical test of each of the following 30 substances :—

(a) Rochelle salts; (b) Glycerol; (c) Potassium Formate; (d) Benzoic acid; (e) Cane sugar; (f) Methyl alcohol.

SECOND HALF.

Examiner—R. N. SEN, ESQ., M.A., M.Sc., F.C.S.

Answer Question 5 and two of the remaining three questions.

5. How would you show that Aniline contains Carbon, Hydrogen 40 and Nitrogen ?

Calculate the percentage of Carbon, Hydrogen and Oxygen in an organic compound from the following data :—0·2046 gram of substance gave on combustion 0·2985 gram of carbon dioxide and 0·1255 gram of water.

6. Explain the formation of Chloroform from Alcohol and Acetone. 30 How would you determine the purity of a specimen of Chloroform ? What impurities is it likely to contain ?

7. Name some of the constituents of Opium. How is Morphine 30 obtained, and what are its distinctive reactions ? How would you distinguish Strychnine from Brucine ?

8. How would you prepare Glucose and Lactose, and how would 30 you distinguish them ?

What are the products of hydrolysis of cane sugar and starch ?

How would you convert cane sugar and starch into ethyl alcohol ?

Final M.B. Examination.

April, 1918.

MEDICINE.

First Paper.

Examiner—Rai Bahadur Dr. Upendranath Brahmachari, M.A., M.D., Ph.D.

The questions carry equal marks.

First Half.

1. Discuss the etiology, and give the symptoms and diagnosis of acute anterior poliomyelitis, referring especially to some of the atypical forms.
2. Give the etiology, signs, symptoms and diagnosis of Empyema (Purulent pleurisy).

Second Half.

3. Discuss the causes of a bruit at the base of the heart.

Or,

Give the symptoms, signs and differential diagnosis of a mediartinal tumour.
4. Discuss the causes of Leucopenia and Leucocytosis.

MEDICINE.

Second Paper.

Examiner—Lt.-Col. J. T. Calvert, M.B., M.R.C.P., I.M.S.

The questions carry equal marks.

First Half.

Enumerate the causes which give rise to enlargement of the spleen. Give the differential diagnosis of the common types met with in the wards.
2. Give the signs, symptoms and diagnosis of amoebic dysentery. Mention briefly its treatment.

SECOND HALF.

3. What is the normal position of the heart's apex beat ? Mention all the conditions under which that position may be altered.

4. To what causes may increased frequency of micturition be due ? How would you investigate such a case ?

Or,

What are the causes of tremor ? Discuss briefly the differential diagnosis ?

MEDICINE.

HONOURS PAPER.

Candidates are required to give their answers in their own words as far as practicable.

PART I.

1. What are the causes of a swelling or tumour in the right iliac fossa (in the male) ? Discuss the differential diagnosis.

2. Give the etiology, morbid anatomy, symptoms and diagnosis of chronic pancreatitis.

PART II.

1. Give the etiology, physical signs, symptoms, diagnosis and treatment of sprue.

2. Give the physical signs, symptoms and diagnosis of adhesive pericarditis.

SURGERY.

FIRST PAPER.

Only TWO *questions in the first half to be answered.*

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—COL. H. STEVENS.

1. State the difficulties which may be met with in Cithotrity and how they may be overcome. 75

2. Describe a case of tubercular disease of the upper epiphysis of the humerus. 75

3. Describe the anatomy and treatment of impacted fractures of the wrist and ankle. 75

SECOND HALF.

Examiner—DR. SURESPRASAD SARBADHIKARY, C.I.E., B.A., M.D.

4. State the symptoms, progress and treatment of septic infection   75
of the lateral sinus.

5. Describe the disease known as " Oriental Sore " and its   75
treatment.

SURGERY.

SECOND PAPER.

Only TWO questions in the first half to be answered.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiner—DR. SURESPRASAD SARBADHIKARY, C.I.E., B.A.,
M.D.

1. Under what circumstances are collections of blood or sangui-   75
neous fluid found in the pleura ? Discuss the symptoms and
treatment ?

2. State the causation, diagnosis and treatment of subdiaphrag   75
matic abscess.

3. Discuss the treatment of a freshly received septic compound   75
fracture of the thigh in the lower third.

SECOND HALF.

Examiner—COL. H. STEVENS.

4. Describe the pathology, prophylaxis and treatment of tetanus.   75

5. Describe the symptoms and treatment of mucous colitis.   Make   75
a differential diagnosis between that condition and new growth.

MIDWIFERY.

Pass Paper.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks

Write the answers to the two halves in SEPARATE *books.*

First Half.

*Examiner—*MAJOR H. B. STEIN, M.D., I.M.S.

1. How will you diagnose a case of backward displacement of the gravid uterus ? What are its dangers ? Describe your treatment of the condition. 125

2. What are the benign tumours of the uterus ? What secondary changes may occur in them ? Describe the symptoms and treatment. 125

Second Half.

*Examiner—*Dr. KEDARNATH DAS, C.I.E., M.D.

3. How would you treat a case of complete rupture of the perinæum discovered 15 hours after delivery ? 125

4. Write short explanatory notes on the following terms :— 125

    Induction of labour.
    Accouchement Force.
    Pubiotomy.
    Primary uterine inertia.
    Hegar's sign of pregnancy.

Or,

What is Hyperemesis gravidarum ? Describe its aetiology, patho- logy, symptoms, prognosis and treatment. 125

MIDWIFERY.

Honours Paper.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

First Half.

1. Give the indications for vaginal Caesarean Section. Describe the operation in detail. 250

55

SECOND HALF.

2. What are the different forms of Toxaemia due to pregnancy ? 250
Discuss the aetiology of the Toxaemia of pregnancy

PATHOLOGY.

PASS PAPER.

Only FIVE *questions to be answered.*

The questions carry equal marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiner—LT.-COL. SIR LEONARD ROGERS, KT., C.I.E., M.D.,
I.M.S., F.R.S.

1. Describe the naked-eye appearances found post mortem in acute
miliary tuberculosis. State how you proceed to isolate in pure culture
the causative organism.
2. What tumours are most commonly met with in the breast ? How
would you distinguish each microscopically ?
3. Discuss the physical and chemical changes which influence the life
of pathogenic bacteria outside the body, illustrating your answer by
examples.

SECOND HALF.

Examiner—DR. TARAKNATH SUR, L.M.S.

4. Describe the morbid changes in the liver that are associated with
the following conditions:—(1) Amoebic infection. (2) Amyloid disease.
(3) Anaemia (pernicious).
5. Enumerate the various nematodes that are pathogenic to man.
State briefly the morbid lesions produced by each of them.
6. Name the various pathogenic micro-organisms that are found in
connection with the urine. State the significance of their presence and
the methods of their clinical demonstration.

PATHOLOGY.

HONOURS PAPER.

Only THREE *questions to be answered.*

All the questions carry equal marks.

FIRST HALF.

1. What pathogenic organisms are most frequently met with in contaminated wounds, including war wounds? Describe the lesions produced by the anaerobic varieties.

2. Describe the microscopical appearances of the crystals met with in the urine, and note the pathological significance of each.

SECOND HALF.

3. Describe the characters of the different fluids obtained by paracentesis abdominis. How would you proceed to examine them for their differentiation?

4. Describe the following phenomena, illustrating with examples, and mention the value of each in practical bacteriology :—

(1) Bordet-Durham Reaction.
(2) Arthus Phenomenon.
(3) Pfeiffer's Phenomenon.
(4) Haemolysis Test.

MEDICAL JURISPRUDENCE.

Candidates are required to give their answers in their own words as far as practicable.

Only TWO *questions to be answered in each half.*

The questions carry equal marks.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

*Examiner—*MAJOR N. P. SINHA, M.B., M.R.C.P., I.M.S.

1. Define—Hallucination, Suggillation, Adipocere, Melancholia, Viable age, and Criminal Responsibility.

2. Discuss fully the signs and symptoms, treatment and post-mortem appearances in a case of poisoning by Arsenic.

3. How would you proceed to examine in a case of alleged Rape of a girl ten years of age?

SECOND HALF.

Examiner -- RAI BAHADUR DR. LALBIHARI GANGULI, M.B.

1.   In a case of Rupture of the Spleen, how would you determine—

 (*a*) whether the rupture was caused by violence or otherwise ;
 (*b*) if by violence —was it homicidal or accidental ?
 (*c*) whether the rupture was caused before or after death ?

2.   How does poisoning by *Nerium Odorum* arise ?   What is its active principle ?   Describe the signs, symptoms and treatment of such poisoning.

3.   What is death by " Suffocation " ?   Mention its causes.   Describe the post-mortem appearances of homicidal suffocation, the victim being an adult male.

HYGIENE.

Only TWO *questions from each half are to be answered.*

Candidates are required to give their answers in their own words as far as practicable.

Equal value is attached to each question.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiner—DR. C. A. BENTLEY, M.B., D.P.H.

1.   You are asked to organize a campaign against malaria, by the method of quinine distribution, in a small town of about 3,000 population, with a spleen index of 30%.   Describe in detail what arrangements you would make, and give a rough estimate of the cost.

2.   Describe in minute detail the sanitary defects of—

 (*a*) any school in which you have read ;
 (*b*) any house, mess, or hostel in which you have lived ;   mentioning in each case the special dangers to health likely to occur.

3.   What do you mean by (*a*) disinfection, (*b*) deodorisation, (*c*) sterilization ?   Mention examples of each.   Would you employ disinfectants in the case of (1) plague and (2) malaria ?   If so, what form should they take ?

SECOND HALF.

Examiner—DR. TARAKNATH MAJUMDAR, L.M.S., D.P.H.

4.   Suppose you are appointed a Health Officer of a small town in Bengal with a population of 10,000 persons.   The water-supply of the town is by means of tanks and wells, and is found to be both inadequate

and impure. The nearest river is at a distance of 10 miles from the town. Draw up a scheme for the supply of pure water for the town, taking into consideration that the funds at your disposal are moderate. Describe what special precautions will be taken by you for the protection of the water-supply of the town, when there is an epidemic of cholera in an adjacent village.

5. What do you understand by the term " Carriers " ? Mention the diseases which are transmitted through carriers. Describe briefly the preventive measures which should be taken in these diseases so as to prevent the spread of infection through carriers.

6. Assuming that all known means of efficient disinfection are at your disposal, how would you proceed to disinfect (1) woollen materials found in the room of a small-pox patient, (2) discharges of a typhoid patient, (3) valuable manuscripts and books, (4) a brick-built room recently occupied by a small-pox patient, (5) blankets and bedlinen of a patient suffering from tuberculosis of lungs ?

Preliminary Examination in Law.

January, 1918.

JURISPRUDENCE.

Paper-setter—B. K. ACHARYYA, ESQ., B.A., LL.B.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Only FOUR *questions to be answered in each half.*

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiners— { B. K. ACHARYYA, ESQ., B.A., LL.B.
{ P. CHAUDHURI, ESQ., M.A.

1. State and explain Holland's definition of "Jurisprudence."   10
2. "Law has been for centuries described as a 'command,' but   10
this description, though essentially true, is inadequate to the extent
of being misleading."—*Holland.* Discuss.
3. What do you understand by "Substantive Law" and "Ad-   10
jective Law"? Mention Holland's classification of Substantive Pri-
vate Law.
4. Define and mention the requisites of a "juristic act."   10
5. "A right which is at rest has to be studied with reference to its   10
'orbit' and its 'infringement." Explain.
6. "The object of a developed system of law is the conservation,   10
whether by means of the tribunals or of permitted self-help, of the
rights which it recognizes as existing."—*Holland.* Elucidate
7. "The Law of nations is but private law 'writ large.'" De-   10
velop.

SECOND HALF.

Examiners— { BIJANKUMAR MOOKERJEE, M.A., M.L.
{ ATULCHANDRA GUPTA, ESQ., M.A., B.L.

8. Mention and discuss the agencies by which Law is brought into   10
harmony with society.
9. "The movement of the progressive societies has hitherto been   10
a movement *from status to contract.*" Comment.

10. " The fate of the Hindoo law is, in fact, the measure of the value of the Roman Code." Explain.   10

11. " The more archaic the Code, the fuller and the minuter is its penal legislation." Elucidate.   10

12. " The English constitution as we find it to-day is, in fact, the product of a gradual development, and it would not be reasonable to suppose that the final stage of that development has been reached, but rather that it will go on growing and expanding with the ever-widening circles of national and imperial life."—*Ridges.* Discuss.   10

13. " Conventions are ultimately dependent upon the laws of the land."—*Ridges.* Explain and illustrate.   10

14. What do you understand by: *Referendum*; *Writ of Habeas Corpus*; *Martial Law*; *Droit Administratif*; *Bill of Rights*?   10

ROMAN LAW.

Paper-setter—DR. S. C. BAGCHI, B.A., LL.B., LL.D.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

Only FIVE *questions to be attempted in each half.*

FIRST HALF.

Examiners— { DR. S. C. BAGCHI, B.A., LL.B., LL.D.
{ R. S. BAJPAI, ESQ., B.C.L.

1. Give a short account of the Roman legislative assemblies at the end of the Republic. What opinions have been expressed as to the function and existence of the *Comitia Tributa*?   10

2. Give a short account of the Roman family system during the Regal period. What is Mommsen's theory of the gentilical relationship?   10

3. What is the essence of slavery according to Justinian? How does Buckland criticise the test of slavery as laid down in the Institutes? Give some examples of ' owner-less ' slaves.   10

4. What were the essential conditions of Marriage in the time of Gaius? Write a note on *Connubium*.   10

5. Describe shortly the ceremony of adoption in classical times. What were the effects of adoption in the time of Justinian?   10

6. What is a consensual contract in Roman law? Illustrate your answer by a concrete example. *X* agrees to buy *Y*'s horse; the conditions of the sale are to be put in writing; *Y* agrees, but sells the horse to *Z* before the conditions of the proposed sale to *X* are put in writing. Is the sale to *Z* valid in Roman Law?   10

7. How did Justinian modify the law of intestate succession ?
How would the property of A in the adjoining table be divided
amongst his heirs ?

A (male, dead) married, B (dead) married, C (male, dead)

| | |
P (male, dead) | |
     D (male, dead)   E (male)
       | |
       | X (male)
  F (male)   G (male)
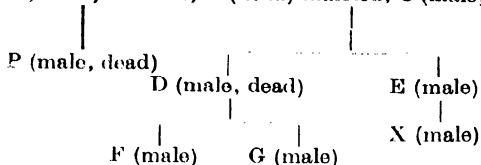
SECOND HALF.

Examiners— { S. C. RAY, ESQ., B.A., LL.B.
{ D. N. MITTER, ESQ., B.Sc., LL.B.

8. What proposition does Jethro Brown advance to illustrate the   10
relation of State regulation to liberty ? Discuss in this connexion
the question regarding the control of the unemployable.
9. " Puritanism achieved much, yet the vision of a Puritan State   10
takes its place amongst the splendid illusions of history." Discuss
this remark, noticing the causes of such failures.
10. What is the " organic theory " of the State ? What objec-   10
tions may be urged against such a theory ?
11. How should a practical legislator deal with pauperism (*a*) in   10
England, (*b*) in India ?
12. How far would you support Prof. Jethro Brown's remarks on   10
Class legislation ?
13. "I love my family better than myself ; my country better   10
than my family ; mankind better than my country. "—*Fénélon.* What
would a modern legislator consider to be the bearing of this remark
on the rights of the alien ?
14. Discuss briefly whether the economic issues involved in the Trust   10
justify legislative interference.

HINDU LAW.

*Paper-setter—*MR. BRAJALAL CHAKRABARTI, M.A., B.L.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiners— { DR. NARESCHANDRA SENGUPTA, M.A., D.L.
{ BRAJALAL CHAKRABARTI, ESQ., M.A., B.L.

1. Give the different sources of the Hindu Law as it is adminis-   10
tered at the present day, and explain the origin of the different
schools in the same.

Or,

Give the rules of interpretation by which a mandatory ordinance can be distinguished from an optional precept, and explain their application by reference to the case of the taking in adoption of an only son.

2. State the circumstances under which, according to the different schools, a widow is competent to adopt a son to her husband. In making an adoption does she act as an agent for her husband or does she act in exercise of an independent discretion of her own ?   !0

Or.

Explain the principle laid down in the case of *Tagore* v. *Tagore* as to the validity or otherwise of a gift in favour of an unborn person, and discuss how far the rule would apply to the case of a gift in favour of an idol to be consecrated after the death of the donor.

3. Explain the nature and extent of the power of the *karta* of a   10
joint Hindu family in the management of the property of the family, and the extent of his liability to render an account to the other members.

Or,

Explain the nature of the interest a member of a joint Mitakshara family has in the property of the family, and discuss how far a sale or gift of the property made by him would be operative against the other members.

4. A Hindu had two wives, by one of whom he had one son and   10
by the other he had two sons. He died leaving his mother, his two widows and his three sons surviving him. Upon a partition by the sons what would be the shares respectively of the mother and of each of the widows ?

5. A creditor got a decree for money upon a simple bond against   10
a member of a joint Mitakshara family composed of the debtor, his sons and his brother. Discuss how far it would be open to the creditor to realise his dues out of the joint family property, either when he attaches the property in execution in the lifetime of the debtor, or when he does so after the death of the latter.

Second Half.

Examiners— { Nagendranath Mitter, Esq., M.A., B.L.
{ Jyotiprasad Sarbadhikari, M.A., B.L.

6. Define the term *Bandhu* and state to how many degrees that   10
relationship extends either for marriage or for succession. •

Or,

Explain the cardinal principles that determine the order of succession in the Mitakshara and the Dayabhaga schools of Hindu Law and show, by reference to a concrete case, that their application sometimes leads to a divergence in the practical results.

7. Explain the reasons assigned by the different schools for put-   10
ting the mother before or after the father in the order of succession.

Or,

Show how far unchastity affects the right of a female to inherit to her male relations, and discuss how far it debars the latter from inheriting to her.

8. Explain the meaning of the term *stridhan*, giving some of the important types of it and showing how far the course of the subsequent devolution of such property is determined by the nature of its origin.

Or,

Give the principal characteristics of an impartible estate and show how far it is liable for the debts of a previous holder of it.

9. Three daughters had inherited the property left by their father. One of them died leaving her surviving son and the two sisters, one of whom was a childless widow and the other had two sons.* On whom would the property left by her devolve ?

10. *A*, a Hindu widow, borrowed money from *B* by mortgaging a portion of the estate she had inherited from her husband, and the transaction was assented to by *C*, who was then the presumptive reversionary heir of her husband. *B* got a decree on the mortgage and bought the property in execution. On the death of *A*, *D*, the actual reversionary heir, sued *B* for the recovery of the property. Discuss the rights of the parties.

BUDDHIST LAW.

Paper-setter—MR. MAUNG MAY AUNG, M.A., LL.B.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer only FIVE *questions in each half.*

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiner—MR. MAUNG MAY AUNG, M.A., LL.B.

1. State the rules laid down by the Dhammathats as regards the wife's right to a divorce on the ground of her husband's desertion, and discuss the qualification laid down in *Thein Pe* v. *U. Pet.*

2. When does a Buddhist couple stand towards each other in the relation of *nissaya* and *nissita* ? Explain how this relationship may affect (*a*) their ownership of *lettetpwa* property, (*b*) partition of *payin* property on a divorce by consent.

3. Examine, with reference to cases, the right of Buddhist husband to sell the joint property of himself and his wife without her consent or against her will.

4. "The law requires that Adoption shall not be a hole-and-corner matter." Comment. How would you prove the fact of an adoption?   10

5. Argue for and against the proposition that a *Kittima* son succeeds not only to the estate of his adoptive parents, but also to property left by the parents' relatives.   10

6. Have co-heirs a right of pre-emption in respect of divided property?   10

7. State and explain the principles of Buddhist Law with regard to *shinbyu* gifts.   10

SECOND HALF.

8. "An inheritance shall not ascend." Comment.   10

9. Where both husband and wife die at the same time or within a short interval of one another, and leave no issue or other descendants, the relatives on both sides inherit. Why is this so? Suggest (giving reasons) what should be the length of the 'short interval.'   10

10. *A* and *B* are a Buddhist couple who have one child *C*. After *C* attains majority, *A* dies. Can *C* claim a quarter of the parents' estate from *B*, if the latter (*a*) remains a widow or widower, (*b*) re-marries?   10

11. *A* married three wives in succession. On his death, he left three children, *B*, *C* and *D*, by his deceased first wife; one child, *E*, by his deceased second wife; and the third wife, *F*. His estate consists partly of property taken by him to the third marriage and partly of property jointly acquired during the continuance of the third marriage. To what shares are *B*, *C*, *D*, *E* and *F* entitled respectively?   10

12. *A* married two wives in succession and survived both. His heirs are four children by the first wife and two children by the second wife. His estate consists (1) of property inherited by him during the continuance of the second marriage, and (2) of property acquired by him after the second wife's death. How would you divide the estate among the children on *A*'s death?   10

13. Can an illegitimate son inherit the estate of his natural father, if the latter dies (*a*) unmarried, (*b*) leaving a widow but no legitimate children? If so, to what extent?   10

14. *A*, a bachelor, dies leaving two cousins—*B*, the son of *A*'s father's elder brother, and *C*, the daughter of *A*'s mother's younger sister. *A* had been living with *B*, and the latter tended *A* during his last illness and performed the funeral ceremonies. Who should succeed to *A*'s estate?   10

Intermediate Examination in Law.

January, 1918.

MOHAMEDAN LAW AND LAW RELATING. TO PERSONS.

*Paper-setter—*Mr. S. Khuda Buksh, M.A., B.C.L.

Candidates are required to give their answers in their own words as far as practicable.

Write the answers to the two halves in SEPARATE *books.*

First Half.

Examiners—{ Mr. S. A. Khuda Buksh, M.A., B.C.L.
{ Mr. A. S. M. Latifur Rahman, M.A.

1. What are the sources of Mohamedan Law ? What is the 10 general rule of interpretation of the Hanafi Law ?

2. How is the property of a deceased Mohamedan to be applied ? 10 To what extent is the heir of a deceased Mohamedan liable for debts of the deceased ? Illustrate your answer.

3. A Mohamedan dies leaving a widow, a daughter and two 10 sisters. After his death a suit is brought by a creditor of the deceased against the widow and the daughter who alone are in possession of the whole estate, and a decree is passed " against the assets " of the deceased. Are the decree and the sale in execution of the property left by the deceased binding on the sisters though they were not parties to the suit ?

Or,

A, who has a son B, makes a gift of his property to C. B, alleging that the gift was procured by undue influence, sues C *during* A's *lifetime* on the strength of his right to succeed to A's property on A's death. Is the suit maintainable ? State your reasons.

4. A Mohamedan dies leaving two sons and three daughters of a 10 uterine brother, and three sons and four daughters of a uterine sister. What would each of these take ?

Or,

A Mohamedan dies leaving a full brother's son's daughter and a sister's daughter's son. Who will succeed ? State your reasons.

5. Discuss the law of gifts with conditions, and illustrate your 10 answer

SECOND HALF.

Examiners— { MR. MANMATHANATH RAY, M.A., B.L.
{ MR. SASANKAJIBAN RAY, M.A., M.L.

6. *A* enters into a contract to serve *B* ; *C*, with knowledge of the 10
existence of the said contract, intentionally induces *A* to break his
contract so as to cause loss to *B*. Can *B* sue *C* ?

Or,

X was employed from day to day to do certain work for *Y*. *Z*,
another servant of *Y*, objected to work with *X* on certain grounds
and threatened to leave work unless *X* was dismissed. Thereupon *Y*
dismissed *X*. Does action lie against *Z* ?

7. What remedy has a British subject in respect of a claim made 10
under a contract with the king or his servants acting in an official
capacity ?

Or,

What is the domicile of origin of a person ? How does a person
acquire a new domicile ?

8. What is the period of minority (*a*) according to the English 10
law, (*b*) according to the Indian Majority Act of 1875 ? How is the
period computed ?

9. Explain the expressions " King can do no harm " and " King 10
never dies."

10   In the case of a contest between the father and the mother 10
for the custody of a boy aged five, who will be entitled to preference —

(*a*) if the parties were Christians,
(*b*) if they were Hanafi Mohamedans,
(*c*) if they were Shiah Mohamedans ?

Or,

Can a writ of Habeas Corpus be issued when a person has been
interned without trial under the Defence of the Realm Statute ?

LAW OF TRANSFER.

Paper-setter—MR. BIRAJMOHAN MAJUMDAR, M.A., B.L.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiners— { MR. BIRAJMOHAN MAJUMDAR, M.A., B.L.
{ MR. J. W. CHIPPENDALE, M.A., B.L.

1. How far do the provisions of the Transfer of Property Act 10
affect any rule of Hindu Law relating to transfers by act of parties ?

Discuss whether a gift to an unborn person is valid under the Hindu Law.

2. What are the exceptions to the general rule that ' property of   10 any kind may be transferred ' ?

Discuss *either* whether (*a*) the right of pre-emption under the Mahomedan Law, *or* (*b*) the right to future maintenance of a Hindu widow, are transferable.

<center>*Or,*</center>

Explain the distinction between a vested interest and a contingent interest. Give an example of each.

X transfers a certain farm to *Y* on condition that *Y* shall murder her husband *R*. Is the transfer valid ?

3. Is the gift of an interest for life only to an unborn child valid ?   10 Give reasons.

A property is given to *X* for life and then to the eldest unborn son of *Y* when he will attain the age of 25. At the time of the death of *X*, the eldest son of *Y* attains the age of 20. Discuss whether the gift to the unborn son is valid.

4. State the principle of ' election ' as laid down in the Transfer of Property Act. Illustrate your answer by an example.

A contracts to sell an estate to *B* and pays Rs. 1,000 in advance. Before conveyance, *A* sells it by a registered deed to *C* who has notice of the contract. What is the remedy which *B* has against either *A* or *C*.

<center>*Or,*</center>

Explain the doctrine of *lis pendens*.

Is a *bona-fide* purchaser for value without notice exempted from the operation of this rule ?

5. Discuss the principles laid down in *Lala Hakim Lal* v.   10 *Mooshahar Salm*, I.L.R. 34 Cal. 999, as to fraudulent conveyances to defeat and delay creditors. Under what circumstances does the presumption in favour of the creditor that the transfer is made for such purposes arise ?

<center>SECOND HALF.</center>

<center>*Examiners—* { MR. KARUNAMAY BASU, M.A., B.L.
MR. NAGENDRANATH GHOSH, M.A.. B.L.</center>

6. Describe briefly the influence of equity on the common law   10 conception of a mortgage.

Give two examples illustrating how equitable mortgages may arise.

<center>*Or,*</center>

Distinguish between mortgage by conditional sale and English mortgage. Give examples.

What are the essential requisites of a valid mortgage under the Transfer of Property Act ?

7. Under what circumstances is a prior mortgagee postponed to a   10 subsequent mortgagee ? Give two examples.

<center>*Or.*</center>

Distinguish between Marshalling and Contribution. Illustrate your answer by examples.

8. A suit for ejectment has been brought against a lessee on the 10 ground of forfeiture for disclaiming the title of the lessor. After the institution of the suit, rent is accepted from the lessee by the plaintiff. The defendant takes the plea of waiver. Discuss whether the suit will fail on this ground.

Or,

State how a valid gift of immoveable property may be made under the Transfer of Property Act.

Under what circumstances may a gift be revoked ?

9. State the different classes of documents of which registration is 10 optional under the Indian Registration Act.

What is the rule as to the admissibility of an unregistered document of which registration is compulsory under the above Act ?

10. *A*, in order to avoid certain creditors who obtained decrees 10 against him, executed a deed of relinquishment in favour of *B*, alleging that the property belonged to the latter; the decrees were ultimately set aside on appeal. In the meantime *B* transferred 8 as. share of the property to *C*. *A* then sued *B* and *C* to recover possession of the property on declaration that the deed of relinquishment was a fictitious document which conveyed no title upon *B*, and consequently *C* also acquired no interest in it. It was found that *C* was not a *bona-fide* purchaser for value without notice. The High Court held that *A* was entitled to succeed. Justify or controvert.

REAL PROPERTY AND SUCCESSION.

Paper-setter—MR. J. W. LANGFORD JAMES, M.A.

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiners— { MR. J. N. MITTER, M.A.
DR. S. K. GUPTA, M.A., B.L., B.A., B.LITT., PH.D.

1. What are the essential elements in a mortgage ? What forms 10 of it are recognized in British India, and by what names are they known ? How can it be effected ?

2. In what way are voluntary settlements of land liable to be 10 defeated ?

Or,

How far can contractual rights and liabilities be permanently annexed to interests in land ?

3. Distinguish between joint tenancy and tenancy in common. 10 What right has one joint tenant to compel (*a*) partition, (*b*) sale of the joint property ?

Or,

What is meant by " covenants which run with the land " ? What covenants run with the land (*a*) on an assignment of a lease, (*b*) on a sub-lease ?

4.   Explain by means of an example the rule in Shelley's case.   10
5.   Write short notes on the following :—   10

(*a*) Tacking, (*b*) easement in gross, (*c*) contingent remainder, (*d*) interisse termini, (*e*) relief against forfeiture.

SECOND HALF.

Examiners— { MR. ASUTOSH MUKHERJEE, M.A., B.L.
             { DR. JADUNATH KANJILAL, M.A., D.L.

6.   Define " Codicil," " Probate," " Executor de son tort,"   10
" Specific legacy," " Privileged will."

Or,

State and explain the scope and objects of—

(*a*) The Indian Succession Act,
(*b*) The Hindu Wills Act.

7.   " A person taking under a Hindu will must either in fact or in   10
contemplation of law be in existence at the death of the testator."
Discuss the above.

Or,

State and discuss shortly the salient points in *Mirza Kussatulani* v.
Nawab Nuzhab-ud-Dowlah, L.R. 32 I.A. 244.

8.   *T*, the administrator of the estate of *H*, finds that it is   10
necessary in the due course of administration of the estate to sell
certain zemindary lands belonging to the estate.   *A* is a possible
purchaser.   Advise *A* as to the purchase.   Would your answer be
different, and if so how, if *T*, instead of being administrator, was
executor ?

9.   Answer *one* of the following :—   10

(*a*) *W* by his will bequeathed to *B* one of his estates (called
Sultanpur) on the death of *A*.   By a subsequent clause in the will *W*
bequeathed the whole of his property to *A*.   On *A*'s death *B* claims
Sultanpur from *A*'s heir.   Advise *A*'s heir whether he should comply
with the claim.

(*b*) A testator, by the first clause in his will, gives his estate of
Ramnagar to *S*, and by the last clause gives it to *R*.   Is *S* or *R*
entitled to Ramnagar ?   Give your reasons.

10.   Answer *one* of the following :—   10

(*a*) *K* by his will gives his house to *B* and the residue of his estate
to *C*.   *K* and *B* are both drowned in the same boat accident.   Both
B's heir and *C* claim the house.   Whose claim should succeed ?   Give
your reasons.

(*b*) A sum of money is bequeathed to *A* for his life and after his
death to *B*; and after *B*'s death, to such of the sons of *B* as shall
attain the age of 25 years.   *A* and *B* both survive the testator.
Discuss the validity of the bequest to take effect after the death of
B.

CONTRACTS AND TORTS.

Paper-setter—DR. SARATCHANDRA BASAK, D.L.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiners— $\left\{\begin{array}{l}\text{MR. JOGINCHANDRA DATTA, M.A., B.L.} \\ \text{MR. SAMATULCHANDRA DATTA.}\end{array}\right.$

1. " Past consideration is no consideration at all." Discuss. 10

Or,

Illustrate the distinction between 'penalty' and 'liquidated
damages,' and state how the Indian Contract Act differs from the
English law in this respect.

2. Discuss the assignability of contractual rights by act of 10
parties.

Or,

" Notice to the agent is notice to the principal." Discuss.

Or.

3. Discuss the liability of the minor partner for the obligations of 10
the firm.

Or,

Illustrate the principle relating to the communication of accept-
ance and of revocation of a proposal.

4. A person who is competent to contract being under the 10
immediate necessity of raising money borrows it at an exorbitant
rate of interest by mortgaging his properties, which are sufficient
security for the loan. Can a court of equity relieve him from paying
anything more than a reasonable interest ? Give reasons.

5. A contracted to pay a sum of money to B on 2nd January 10
1848, but failed to pay the money on that day. B, in consequence of
not receiving the money on the due date, was unable to pay his
debts and was totally ruined. What would be the damages payable
by A to B ? Give reasons for your answer.

SECOND HALF.

Examiners— $\left\{\begin{array}{l}\text{DR. SARATCHANDRA BASAK, M.A., D.L.} \\ \text{MR. RAJENDRACHANDRA GUHA, M.A., M.L.}\end{array}\right.$

6. Discuss the principle of contribution amongst co-sureties. 10

Or,

Write short notes on one of the following :—

(a) *Smith* v. *Hughes*, L.R. 6 Q.B. 597.
(b) *Quinn* v. *Leathem*, (1901) A.C. 495.

56

7. "There are many acts which, though harmful, are no wrongful, and give no right of action to him who suffers their effects."—*Salmond.*   Illustrate.

Or,

"Every injury imports a damage, though it does not cost the party one farthing."   Explain.

8. Explain the distinction between 'absolute privilege' and 'qualified privilege' as a defence to an action for libel.   10

Or,

Discuss the conditions of liability in an action for malicious prosecution.

9. *A* is owner and *B* driver of a taxicab *X*; and *C* is owner and *D* driver of another taxicab *Y*.   *B* and *D* were both driving furiously and, in consequence of such rash driving, a collision took place between *X* and *Y* and a passenger *E* in the taxicab driven by *B* was hurt.   Has *E* any remedy, and against whom ?   Give reasons.   10

10. The servants of a railway company illegally ejected *A*, a passenger, from a railway carriage, whereby he lost a pair of opera-glasses which he left behind him in the carriage.   Can *A* maintain any action against the railway company for the loss of his glasses ?   Give reasons for your answer.   10

Final Examination in Law.

January, 1918.

LAND TENURES.

Paper-setter—Mr. Sibchandra Palit, B.L.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write the answers to the two halves in separate *books.*

First Half.

Examiners— { Surendranath Guha, Esq., M.A., B.L.
{ Gopalchandra Das, Esq., M.A., B.L.

1. (a) What considerations led to the enactment of Act XI of 1859   10
(Revenue sale law) ?
Or,

(b) What preliminaries have to be observed before an estate can
be sold under Act XI of 1859 ?

2. (a) What considerations led to the enactment of Regulation II   10
of 1793 ?
Or,

(b) What do you understand by—Zamindari, Lakhraj, Talook,
Istimrari mukarari ? What are the incidents attached to each ?

3. What do you understand by the term Abwab ? How did Ab-   10
wabs originate ? How has the realization of an Abwab been affected
by several enactments ?

4. What are the rights and liabilities of a putnidar under Regula-   10
tion VIII of 1819 ? What are his rights with regard to Chakran lands,
situated within the Putni, resumed by Government and transferred
to the zamindar ?

5. " The right of fishery when once created by Government is for   10
ever enjoyable only in waters that continue to flow precisely over the
ground which was in the Crown at the date of the grant." Discuss
the proposition, supporting your answer by authorities.

Second Half.

Examiners— { Sibchandra Palit, Esq., B.L.
{ Charuchandra Biswas, Esq., M.A., B.L.

6. (a) What are the tests by which you can say that a tenant is a   10
tenure-holder or a raiyat ? Can a raiyat change his status to that of
a tenure-holder, and *vice versa* ? Give reasons for your answer.

Or,

(*b*) What are the rights of a settled raiyat ?   How is the *status* of a settled raiyat acquired ? Are all occupancy raiyats settled raiyats ?   Can a raiyat at fixed rate ever be an occupancy raiyat ?   Give reasons for your answer.

7. (*a*) What do you understand by Khamar lands ?   *A* holds a piece   10 of Khamar land under an ijara lease for a term of years.   He lets it out to *B* who actually cultivates the land for 13 years.   The lease of *A* then terminates.   The landlord under whom *A* held brings a suit to turn out *B*.   Discuss the rights of the parties to the suit.

Or,

(*b*) How are the incidents of the tenancy of the homestead land of a raiyat held not as a part of his holding regulated ?   Is his position affected if he holds the homestead under a landlord different *from* the person under whom he held the agricultural lands ?   Give reasons for your answer.

8. What is the law with regard to devolution of rights of occu-   10 pancy ?

A, a raiyat, having a non-transferable right of occupancy in a piece of land leaves it to *B* by a will.   On *A*'s death his legal heir *C* takes possession of the land.   *B* brings a suit against *C* for recovery of possession.   Discuss the respective rights of *B* and *C*, supporting your arguments by authority.

9.   "Rent is a first charge on the holding or tenure."   What do   10 you understand by it ?   *A* is the owner of a putni.   *B* holds a jama of certain lands within the putni under *A*.   *A* brings a suit for rent against *B* and obtains a decree.   The next year the putni is sold under the Putni Regulation and purchased by *C*.   Thereafter *A* executes his decree and prays for the sale of the holding of *B*.   Can he do it ?   Give reasons for your answer, supporting it by authority.

10.   Under what circumstances can the owner of a dominant tene-   10 ment succeed in an action for damages for infringement of his right of light possessed by him in respect of the tenement ?   Support your answer by authority.

EQUITY.

Paper-setter—ARTHUR BROWN, ESQ., M.A , LL.B.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiners— { ARTHUR BROWN, ESQ., M.A., LL.B. { M. N. BOSE, ESQ., M.A.

1.   "There were two inventers of uses, fear and fraud."—(*Coke*).   10 Comment.

Or,

Contrast and compare (*a*) the object, (*b*) the effect, of the Statute of Uses.

2. In proceedings which formerly came within *either* (*a*) the ex-   10
clusive, (*b*) the concurrent, (*c*) the auxiliary jurisdiction of the Court of Chancery, on what principles did the Court proceed in deciding: (1) whether the suit could be maintained, (2) what remedies should be given.

Discuss the extent to which these principles have been affected by the Judicature Acts.
                                  Or,

Under what circumstances will the Court decree Specific Performance ?

3. State the extent to which Equity is specially favourable to Cha-   10
ritable Trusts.
                                  Or,

Under what circumstances can a trustee who has replaced a trust fund which had been lost through a breach of trust obtain contribution or indemnity from (*a*) a co-trustee, (*b*) a cestui que trust ?

4. *A* is the trustee of two separate trust properties, *X* and *Y*. The   10
cestuis que trust are *B* and *C* respectively. In May 1916 *A* overdraws his account at his bank, *Z*, to the extent of £1,000. The bank presses him in the matter, and in June 1916 he sells *X* and pays the proceeds, viz. £2,000, into his private account at *Z*. In July 1917 he sells *Y* and in like manner pays the proceeds, viz. £3,000, into his private account. The bank knows nothing of the fraudulent nature of these transactions. In August 1917 *A* draws cheques on *Z* to the total extent of £1,500, and shortly after he dies. His account at *Z* is his only asset. Discuss the legal situation as between *B*, *C*, and *Z*.

5. In 1884, *A*, who is the owner of the estate *X*, sells *Y*, a portion   10
of the estate, to *B* in fee simple. In the conveyance *B* covenants for himself, his heirs and assigns that he will not open a shop on *Y*. Shortly afterwards *B* goes abroad and dies. In 1886 *C* occupies *Y* without any title thereto, but subsequently acquires a title under the Statutes of Limitation. In 1916 *C* sells *Y* to *D*, *D* accepting *C*'s title under the Statutes of Limitation. Neither *C* nor *D* know anything of *B*'s original covenant. *D* opens a shop on *Y*. *E*, who has succeeded to *X* as *A*'s heir, consults you as to whether he has any remedy against *D*. Advise him.

SECOND HALF.

Examiners— $\begin{cases} \text{P. N. DUTT, ESQ., M.A., B.L.} \\ \text{P. K. CHAKRABARTI, ESQ., M.A.} \end{cases}$

6. Write notes on the application of *two* of the following maxims:—   10

    (*a*) " Equity follows the law."
    (*b*) " Prior tempore, potior jure."
    (*c*) " Vigilantibus non dormientibus subvenit aequitas."
                                  Or,

How does Equity deal with misdescription in a contract of sale ?

7. Discuss the principle in *Penn* v. *Baltimore.*   10
                                  Or,

State the doctrine of Election and discuss the principle involved.

8.   Discuss fully the equitable presumptions in favour of ademp-   10
tion and satisfaction respectively, distinguishing carefully between
them.

Or,

Write notes on the position at Law and in Equity of

(*a*) a mortgagor in possession,
(*b*) a mortgagee out of possession.

9.   *A* dies in 1916, leaving as heir *B*.   His property comprises the fee   10
simple estates of Whiteacre and Blackacre, worth £800 and £1,000
respectively, certain smaller fee simple property worth £500, and per-
sonalty worth £2,000.   He has, however, mortgaged Whiteacre and
Blackacre for £1,000 and £800 respectively and has incurred in addi-
tion unsecured debts to the extent of £1,500.   After *A*'s death a will
is discovered in which he leaves to *C* Whiteacre, to *D* Blackacre, to
E a legacy of £700, to *F* the rest of his personal property, and to *G*
his residuary realty.

How will *A*'s assets be actually distributed ?   What difference
would have been made in the distribution, had *A* have left unmen-
tioned in his will his residuary realty ?

10.   *X* mortgages his house to *Y*.   The mortgaged deed contains   10
provisions to the following effect :—

(*a*) *X* shall employ *Y*'s son, who is a qualified doctor, as his medi-
cal adviser.

(*b*) If *X* does not pay *Y* his interest punctually, he shall pay com-
pound interest.

(*c*) If *X* wishes to sell his interest in the house, he shall let *Y*
have the first refusal.

(*d*) *X* shall not pay the mortgage off for a period of ten years,
but *Y* may require repayment at any time on giving three
months' notice.

Discuss the validity of these provisions.

EVIDENCE AND CIVIL PROCEDURE.

Paper-setter—MR. JOGENDRANATH MUKERJEE, M.A., B.L.

Candidates are required to give their answers in their own words
as far as practicable.

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiners— { HEMENDRANATH SEN, ESQ., M.A., B.L.
                { JOGESCHANDRA DE, ESQ., M.A., B.L.

1.   Explain *any five* of the following terms and expressions :—   10
" Fact," " Facts in issue," " Evidence," " Proved," " Disproved,"
' Conclusive Proof," and " Document."

2. Explain the following statement:—   10

" The evidence adduced in Courts of Justice being, as it were, a handmaid to jurisprudence, might be expected to partake of the nature and follow the law of the science to which it is ancillary."— (*Best*).

<center>*Or*,</center>

Explain the two-fold grounds of irrelevancy stated by Best in his book on Evidence. What relation do these grounds bear to the principle of law which requires that the best evidence is to be adduced ?

3. What facts can a Court presume without proof, with regard to—   10

   (*a*) any document more than 30 years old, which is produced from proper custody ;

   (*b*) maps and plans purporting to be made under the authority of Government ;

   (*c*) any published map or chart, the statements of which are relevant facts, and which is produced for the Court's inspection ?

<center>*Or*,</center>

Determine the meaning of the word " intentionally " in Section 115 of the Indian Evidence Act :—

" When one person has, by his declaration, act, or omission, *intentionally* caused or permitted another person to believe a thing to be true, and to act upon such belief, neither he nor his representative shall be allowed, in any suit or proceeding between himself and such person or his representative, to deny the truth of that thing."

How has this word " intentionally " been explained by the Judicial Committee of the Privy Council in the case of *Sarat Chandra Dey* v. *Gopal Chandra Laha* (I.L.R. 20 Cal. 296) ?

4. *A* institutes a civil suit against *B*, for the recovery of a property *X*, which, *A* alleges *B* sold to him along with other properties, by a conveyance which has accidentally omitted to mention the property *X*, but in which conveyance a blank space has been left which, it is alleged by *A*, *B* intended to fill up by inserting the description of the property *X*. *A* says that he holds letters from *B*, showing that he intended to convey to him (*A*) the property *X*, along with the other properties mentioned in the deed. Can *A* prove those letters in his suit against *B*, in support of his contention ? Give reasons for your answer.   10

<center>*Or*,</center>

A, as executor to the estate of *X*, by virtue of his last will and testament, has brought a suit against *B* for recovery of damages for trespass on land belonging to the estate of *X*. *B* denies that *A* is executor of *X*'s will, and avers that there is a public right of way over the land in suit, and that it does not belong to the estate of *X*.   .

In this suit, *A* produces—

   (*a*) an order of the District Judge concerned appointing *A* executor of *X*'s last will and testament ;

   (*b*) a judgment in favour of *X* in a suit which *X* brought in his ifetime against *C* for alleged trespass on the same land, and in which *C* pleaded the existence of a public right of way over it.

And *B* produces—

   (*c*) a judgment dismissing a suit which *D* had brought against *Y* or recovery of possession of the same land, on the allegation that *Y* had wrongfully dispossessed him (*D*) of the land.

Are these judgments, or any of them, and the order appointing A executor of X's will, relevant to the suit brought by A against B? If so, which of them, and why?

5. Analyse and illustrate the decision of the Judicial Committee in the case of *Secretary of State for India* v. *Krishnamani Gupta*, L.R. 29 I.A. 104.   10

SECOND HALF.

Examiners—{ SASADHAR RAY, ESQ., M.A., B.L.
JOGENDRANATH MOOKERJEE, ESQ., M.A., B.L.

6. Define the term " decree," and classify decrees.

A sues B. B takes among other defences the plea of res judicata. The Court (*a*) decides that the matter is not res judicata and directs a trial of the other issues, (*b*) decides that the matter is res judicata and dismisses the suit. Does the decision in either case constitute a decree?   10

7. A sues B to recover certain land from him, alleging that B held the land under a lease and that lease had expired. The lease is not proved and the suit is dismissed. A then sues B to recover the same land on the strength of his title. Is the suit barred by res judicata? Give reasons.   10

Or,

A sues B to recover certain property belonging to the estate of C, alleging that his father had been adopted by C's brother D to whom the property descended on C's death. The suit is dismissed on the ground that the adoption is not proved. A then sues B to recover the same property, claiming it as C's *bandhu*. Is the suit barred by res judicata? Give reasons.

8. Specify the circumstances in which proceeds of execution sale can be rateably distributed among several decree-holders.   10

X obtains a decree for money against B. Y obtains a decree for money against the legal representative of B after the death of B. Does the principle of rateable distribution apply as between X and Y?

9. Illustrate the nature of the power of a Court to order amendments, by special reference to the decision in *Chhayemunnessa* v. *Basirar*, I.L.R. 37 Cal. 399.   10

Or,

Illustrate the principle of inherent power of a Court to do justice, by special reference to the decision in *Hukum Chand* v. *Kamalanand*, I.L.R. 33 Cal. 927.

10. Illustrate the principle of restitution by reference to one leading decision.   10

Or,

Explain the statement that " part-payment is only a mode of acknowledgment or admission from which a new promise to pay the remainder may be implied," and consider specially the effect of payment of interest by the principal debtor on liability of the surety.

CRIMINAL LAW.

Paper-setter—MR. BANKIMCHANDRA SEN, M.A., B.L.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Write the answers to the two halves in SEPARATE *books.*

FIRST HALF.

Examiners—$\left\{\begin{array}{l}\text{HARAPRASAD CHATTERJI, ESQ., M.A., B.L.}\\ \text{BANKIMCHANDRA SEN, ESQ., M.A., B.L.}\end{array}\right.$

1. To what extent is insanity a valid plea against an offence ?   10

Or,

To what extent is an abettor liable when the person abetted does an act different from the act abetted ?

2. Discuss the validity of a plea of the right of private defence in   10 *either* of the following cases :—

(*a*) *A* plucks mangoes from *B*'s garden, whereupon *B* comes and strikes *A* with a lathi on the head causing grievous hurt.

(*b*) *A*'s property is sought to be attacked by a bailiff. *A* resists the bailiff, and, in doing so, assaults him.

3. Take *any five* of the following cases and state what offence *A*   10 would *prima facie* be guilty of, and why.

(*a*) *A* removes *B*'s box from the custody of *B*'s servant.

(*b*) *A* fabricates a hand-note in *B*'s name with intent to sue *B* upon it.

(*c*) *A*, with a drawn sword in hand, threatens *B* and compels him thereby to deliver up his purse.

(*d*) *A*, in a letter to *B*, describes *C* as a liar.

(*e*) *A* finds a gold ring lying on the road, and having picked it up, sells it off at once and appropriates the sale proceeds.

(*f*) *A* gets into a consultation with *B* and *C*, as the result of which they all decide to commit theft in *D*'s house.

(*g*) *A* enters *B*'s room, although previously warned by *B* not to do so.

4. Briefly discuss the chief principles of law laid down in *either*   10 of the following two cases :—

(1) *Barindra Kumar* v. *Emperor*, I.L.R. 37, Cal. 467.

(2) *Pulin Behary Das* v. *King-Emperor*, 15 C.L.J. 517.

5. What are the conditions of criminality under the English Law ?   10

SECOND HALF.

6. Under what circumstances can more persons than one be   10
jointly tried ?

Or,

Under what circumstances can a person be tried for more offences
than one at the same trial ?

7. What are the different modes in which a magistrate can take   10
cognisance of an offence ?

Or,

What is the procedure a Magistrate should adopt on receiving a
complaint ?

8. Discuss the legal effect of the procedure adopted in *any two* of   10
the following cases :—

(*a*) A magistrate convicts an accused in a warrant case without
drawing up a formal charge.

(*b*) A magistrate commits an accused to the Court of Session
without being empowered to do so.

(*c*) A magistrate at Hooghly tries and convicts an accused for
an offence committed within the local jurisdiction of the District of
Burdwan.

(*d*) A magistrate tries an accused for robbery under the summary
procedure and sentences him to rigorous imprisonment for six
months.

9. When can a magistrate take action in cases of dispute concern-   10
ing immovable property ?   Give a brief synopsis of the procedure to
be adopted in such cases.

10. Give a brief history of the law relating to Principal and Acces-   10
sory under the English system.

Preliminary Examination in Law.

August, 1918.

JURISPRUDENCE.

Paper-setter—Mr. Pramathanath Chaudhuri, M.A., *Bar.-at.Law.*

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer any FIVE *of the questions in each half.*

First Half.

Examiners— { Pramathanath Chaudhuri, Esq., M.A., Bar.-at-Law.
S. N. Dutta, Esq., M.A., LL.B.

1. Jurisprudence has been defined as " the formal science of positive law." Explain and discuss the above definition. 10
2. Define rights *in rem* and rights *in personam*. State the heads under which rights *in rem* have been classified. 10
3. State and criticise Savigny's analysis of a contract. 10
4. Analyse the notion of ownership, and explain the relation between possession and ownership. 10
5. Distinguish torts from crimes and state their early history. 10
6. Distinguish between " rights at rest " and " rights in motion." Give illustrations. 10
7. " International law is private law writ large." Explain fully the above proposition. 10

Second Half.

Examiners— { Atulchandra Gupta, Esq., M.A., B.L.
Bijankumar, Mukherjee, Esq., M.A., B.L.

1. What is a " legal fiction " ? Explain, with illustrations, why it is considered as one of the agencies by which Law is brought into harmony with society ? 10
2. State Maine's theory about the origin and growth of " jus gentium " and its relation to the Stoic doctrine of " jus naturale." 10

3.   Trace the origin and growth of the Roman law of testamentary   10
succession, and explain what is meant by " universal succession."
4.   State shortly the history of the development of the Roman   10
law of contracts and give a short account of the main divisions into
which the Roman contracts were classified, keeping in view their
historical order.
5.   Describe the main features and explain the fundamental prin-   10
ciples of English Constitution.
6.   Write short notes on any two of the following cases :—   10
     (1)   Exparte Marais
     (2)   *Beatty* v. *Gillbanks.*
     (3)   Bushell's case.
7.   What is codification ?   Discuss its effects on the character   10
and growth of a national system of law.

ROMAN LAW.

Paper-setter—Mr. S. C. Ray, B.A., LL.B.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Answer only five *questions in each half.*

FIRST HALF.

Examiners— { S. C. Ray, Esq., M.A., LL.B.
{ D. N. Mitter, Esq., M.A., LL.B.

1.   Describe shortly the legal work of Justinian, making notes on   10
the various materials used by him.
2.   What were the different ways in which a person could become   10
a slave in Rome ?   How could the master make his slave a freed
man ?
3.   With regard to acquisition of property, describe the rule of   10
Principal and Accessory in the following cases : (*a*) Where a tenant
for life was in possession of the property, (*b*) where *A* melts his silver
together with *B's* gold, (*c*) where *C* paints on *D's* tablet, (*d*) where X
builds on his own land but uses some materials of *Y's.*
4.   Illustrate the different ways in which a Roman will might   10
wholly fail so as to produce intestacy.
5.   Write short notes on (*a*) *expensilatio*, (*b*) *commodatum*, (*c*) *resti-*   10
tutis in integrum, (*d*) *solutio indebiti.*
6.   Describe the incidents of the delict of an " aggravated outrage."   10
7.   What are the different parts of a Formula ?   Illustrate them   10
and show how this system worked.

SECOND HALF.

Examiners— { BABU KARUNAMAY BASU, M.A.. B.L.
S. M. BASU, ESQ., M.A., LL.B.

8. " Most people agree that human Governments have failed to 10
secure social justice." Do you support this statement ? Give your
reasons, with special reference to the subject of militarism.

9. Show how legislation in England during the 19th century was 10
at first influenced by the doctrine of *Laissez faire,* and explain the
circumstances which later on made a large measure of State control
absolutely necessary.

10. " We are not so much concerned with the dead letter of edicts 10
and of statutes as with the living thoughts of men." Trace in outline
these ' living thoughts of men ' in the 19th century, showing the
development of the social life and thought of the period.

11. On what fundamental principle would you base the right of 10
the State to exercise control over the individual ? Give your reasons.

12. Write a short note on Industrial legislation, with special 10
reference to the subject of competition.

13. Discuss the question of Capital punishment. 10

14. Deal with the problem of Unemployment, stating how the 10
remedies should differ under different circumstances.

HINDU LAW.

Paper-setter — DR. DWARKANATH MITTER, M.A.. D.L.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiners— { C. C. BISWAS, ESQ., M.A., B.L.
HIRALAL CHAKRABARTI, ESQ., M.A., B.L.

1. How is the term " Daya " understood by the author of the 10
Mitaksara and Dayabhaga respectively ?

Or,

" There is no such thing as succession, properly so called, in an
undivided Hindu family." Develop this proposition. How far is
this proposition true with regard to an undivided Hindu family
governed by the Dayabhaga school of Hindu Law ?

2. Discuss the liability of a son for the debts of his father charged 10
upon ancestral estate, in a Mitaksara joint family, with special
reference to decided cases. *Or,*

Discuss the question whether under the Mitaksara law self-acquired
immovables are absolutely at the father's disposal or not, with special
reference to decided cases.

3. Discuss the question whether the claim for maintenance is   10
merely a liability which ought, in the first place, to be satisfied out
of family property or an actual charge upon that property which
binds it in the hands of the holders of the property.

Or,

(*a*) What are the rights of a widowed daughter-in-law to mainten-
ance (i) against her father-in-law, (ii) against the heir in possession
of his estate ?

(*b*) What are the rights of the mother on a partition of the estate
left by the father among the sons ?

4. *G* died leaving a son *B*, and a widow *C*, to whom he gave an   10
express authority to adopt in the event of his son's death. *B*, mar-
ried, attained his majority, and died leaving a widow and no issue.
C then adopted a son *R*, who sued *B*'s widow to recover the estate.
Could her estate be divested by the subsequent adoption ? Give
your answer with special reference to a leading case on the subject.

5. Discuss the nature of the widow's estate. Is it correct to   10
speak of the widow's estate as being one for life ?

SECOND HALF.

Examiners— { ASUTOSH MUKHERJEE, ESQ., M.A., B.L.
            { HARICHARAN GANGULY, ESQ., M.A., B.L.

6. State the principles laid down in the leading case of *Gurugovind*   10
v. *Anund Lal*, 13 W.R.F.B. 49.

Or,

"A man can not create a new form of estate or alter the line of
succession allowed by law for the purpose of carrying out his own
wishes or policy." Discuss this with reference to the case of *Tagore*
v. *Tagore*, 9 B.L.R. 377.

7. Discuss the ,meaning of the term *Stridhan* according to (i) the   10
Dayabhaga, and (ii) the Mitaksara.

Or,

A Hindu widow after succeeding to her husband's estate acquires
immovable property with the saving from the income of the estate
and treats such purchases as accretions to her husband's estate.
Is she precluded from alienating the subsequently acquired property
except on the ground of legal necessity ? Give reasons.

8. Discuss the question whether the estate of a widow, once vested,   10
is or is not liable to forfeiture by reason of unchastity subsequent to
the death of her husband, with special reference to a leading case on
the subject.

Or,

"The power of the manager for an infant heir to charge an estate
not his own is, under the Hindu law, a limited and qualified power.
Develop. Refer to a leading case on the subject which you can
think of.

9. The adoption of an only son having taken place in fact, is such 10 adoption null and void under the Hindu law ? Discuss this question with special reference to the decision of the Judicial Committee of the Privy Council in *Sri Balusu Gaulingaswami* v. *Balusu Ramlakhana*, I.L.R. 21 All. 460.

10. Where a Hindu widow mortgaged the estate of her deceased 10 husband with the consent of the next reversioner for the time being, could this alienation be upheld on the theory of the acceleration of the estate of the reversioners ? Discuss this with special reference to the Full Bench decision in *Debi Prosad* v. *Golap Bhagat*, I.L.R. 40 Cal. 721.

Intermediate Examination in Law.

AUGUST, 1918.

MAHOMEDAN LAW AND LAW RELATING TO PERSONS.

*Paper-setter—*Z. R. ZAHID SUHRAWARDY, ESQ., M.A.; B.L.

Candidates are required to give their answers in their own words as far as practicable.

All questions are of equal value.

FIRST HALF.

Examiners—{ S. KHUDA BUKSH, ESQ., M.A., B.C.L.
A. S. M. LATIFUR RAHMAN, ESQ., M.A.

1. What are the sources of the Hanafi law and the rules of interpretation to be followed in case of difference of opinion among the 'master' and 'disciples'?
How far are the mufassil courts in Bengal and the High Court of Calcutta in its Original Jurisdiction bound to administer Mahomedan law ?
2. Distinguish between void and invalid marriages. Illustrate your answer and discuss the legal effect and incidents of an invalid marriage.

Or,

What are agnate and cognate relations ? Discuss the position they respectively occupy in the law of inheritance according to the Sunni and Shia schools.
3. Define *marazul-maut* and describe the tests generally applied to determine it. What is its effect on *hiba-bil-ewaz*, sale and acknowledgment of debt.

Or,

State the rules of Sunni and Shia law governing:—(*a*) bequest to an heir, (*b*) abatement of a legacy, (*c*) lapsing of a legacy.
4. A Mahomedan, who owes Rs. 10,000 to *C*, dies leaving two sisters S_1 and S_2 as his only heirs, and property worth Rs. 30,000. *C* obtains a decree for the amount of his debt against S_1 who is in possession of the whole estate of the deceased. *D*, creditor of S_2, with notice of *C*'s claim obtains a decree against S_2 and purchases her share in a portion of the property in execution of such decree. Discuss the rights of *C* as against *D* according to the views and reasonings of the different High Courts.
5. Compare the Sunni and Shia law of inheritance as to the doctrine of 'Return.'
A Mahomedan dies leaving father, mother and a daughter. Distribute his estate according to the Sunni and Shia law respectively.

Second Half.

Examiners— {MANMATHANATH RAY, ESQ., M.A., B.L.
M. N. KANJILAL, ESQ., M.A., B.L.

1. Discuss legally and historically the claims of the present Royal family to the throne of England.   What statutory limitation is there to the freedom of the descendants of the King in the matter of marriage ? Quote the statute.

Or,

Give a summary of the law relating to natural-born and naturalised British subjects and the rights and disabilities of aliens.

2. Give a short history of legislation relating to contracts by a married woman so as to bind her separate estate.

Explain the terms ' marriage settlement,' ' restraint against anticipation.' ' tenant by courtesy.'

Or,

Summarise the English law relating to the rights of surviving husband and wife respectively in the other's property.

3. Describe the status of a child born out of wedlock according to the English and Mahomedan law.

A, a married woman, commits adultery with *B* and a child is born of the union.   What is the legal presumption as to the status of the child, and how is such presumption to be rebutted according to the two systems of law ?

4. When is the present state of the law relating to the liability of an employer for injury to a workman as such.

A workman gets leave from his work at nightfall and while returning home through the city of London, where all lights were put out by order of Government, is accidentally run over by a passing vehicle and injured. Discuss the employer's liability, if any, for such injury, giving reasons for your answer.

5. Comment on the common law doctrine that the servant undertakes the risks incident to the service.   How far has the Legislature modified it in the case of a ship's crew ?•

LAW OF TRANSFER.

*Paper-setter—*JYOTIPRASAD SARBADHIKARY, ESQ., M.A., B.L.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiners— { BABU BIRAJMOHAN MAJUMDAR, M.A., B.L.
NAGENDRANATH GHOSH, M.A., B.L.

1. What is an actionable claim ? What is necessary for its valid   10 transfer and for what purposes is notice of such transfer essential ?

Or,

Mention some kinds of property which cannot be transferred. Discuss if the following are transferable : (*a*) right to sue for damages for breach of contract, (*b*) a contingent remainder, (*c*) right of a reversioner to inherit after a Hindu widow's death.

2.   What are the conditions under which a property may be valid-   10
ly transferred to an unborn person ?

Or,

" In the rule against remoteness, reference has to be made to possible and not to actual events." Explain. Is a gift to the unborn son of *A*, should he marry, valid ? Give reasons.

3.   What is the reason of the rule in regard to gift to a class (Sec.   10
15 of the Transfer of P. Act) ?

X makes a gift in favour of *A* for life, afterwards to *A*'s eldest son (unborn) for life, and then to *B*, a person in existence at the time of the transfer. Is the transfer to *B* valid ? Give reasons.

Or,

A, a Hindu of Bengal, executed a deed of transfer in 1910 in favour of his grandson *X* and other grandsons to be born thereafter, and delivered possession to *X*. Discuss how far the transfer was valid. Would it make any difference if the deed was executed in 1917 ?

4.   What is the reason of the rule in regard to the doctrine of *lis*   10
pendens ? Would the rule apply (*a*) to an involuntary sale, (*b*) to a transfer by a person who subsequently to the transfer is added as a party to the leading suit, (*c*) to a transfer after decree by the first court but before appeal against the decree is preferred ?

Or,

When is a transferor precluded from pleading that his transfer was *benami* ? State how " good faith " in the section relating to fraudulent transfer (Sec. 53 T. of P. Act) is explained in the case of *Ishan Chander Das Sircar* v. *Bishu Sirdar*, I.L.R. 24 Cal. 825.

5.   Explain and illustrate the difference between a vested remain-   10
der and a contingent remainder. Does the rule against Perpetuity apply to the former ? A gift is made to *A* to be given to him at the age of 18. Does *A* take a vested or contingent interest ?

SECOND HALF.

Examiners— { BABU JYOTIPRASAD SARBADHIKARY, M.A., B.L.
            { RUPENDRAKUMAR MITRA, M.A., M.L.

6.   What is the rule of priority in English law between a legal and   10
an equitable mortgage, *first*, when the equities are equal, and *second*, when the equities are unequal ?

Or,

Define mortgage according to Common Law, Equity, and the Transfer of Property Act. What is the interest that is transferred according to the Transfer of Property Act in a simple mortgage, usufructuary mortgage and an English mortgage respectively ?

7.   Write a short essay on " Clog on the right to redeem," with   10
special reference to the facts of the case of *Noakes & Co.* v. *Rice.*

Or,

Write a short essay on the doctrine of Subrogation, with special reference to the facts of the case of *Gokaldas Gopaldas* v. *Puranmal Premsukdas*, I.L.R. 10 Cal. 1035.

8. What is the interest that passes by a sale and a lease of immov-   10
able property respectively ?   Does ownership pass by a contract of sale of land accompanied with part payment ?   Is there any difference on this point in English Law ?

Or,

What are the essentials of a valid gift ?   In the case of immovable property, is delivery of possession essential ?   When may a gift be revoked ?

9. When is a lease determined by forfeiture, and what amounts to   10
waiver of such forfeiture ?

Or,

What is the effect of surrender and forfeiture respectively on under leases ?

10. A land is sold to *A* for Rs. 200 by a deed executed in Janu-   10
ary ; possession is delivered and the deed is registered in March. The same land is sold to *B* for Rs. 300 by another deed which is executed and registered in February of the same year.   Whose title will prevail ?

What is the effect of non-registration of a document whose regis-tration is compulsory ?

REAL PROPERTY AND SUCCESSION.

Paper-setter—DR. SURENDRANATH SEN.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiners— { P. MITTER, ESQ., *Bar.-at-Law.*
{ J. M. SENGUPTA, ESQ.

1. Explain the following :—

Primogeniture, as it obtains among the landed gentry of England,   10
is a *custom* only and not a *right*.

Or,

A present right to an interest in property which may arise at a period beyond the legal limit, is void, notwithstanding that the person, entitled to it, may release it.

2. Explain five of the following terms :—

Estate tail, Gavelkind, Deed-Poll, Writ of Elegit, Equitable   10
Waste, Joint tenants in tail, and An estate *pur autre vie.*

3. What are the restrictions imposed on the use of land in equity ?   10

Or,

Can an estate tail be barred by Will or Contract ? Give reasons for your answer.

Or.

Enunciate the rule laid down in Shelley's case as to estates in possession and in remainder.

4. Explain and illustrate the difference between a contingent re-   10 mainder and an executory devise.

Or,

Illustrate, with special reference to the use of the terms *Property* and *Estate*, the truth of the following proposition :—" Popular notions of law often contain an element of truth, but they are rarely exact."

5. Where property is usufructuorily mortgaged, may the mortgagor   10 lose his equity of redemption by lapse of time ? Give reasons for your answer.

SECOND HALF.

Examiners— $\left\{ \begin{array}{l} \text{BABU UPENDRANARAYAN BAGCHI, M.A., M.L.} \\ \text{SARATCHANDRA LAHIRI, M.A., B.L.} \end{array} \right.$

6. What are the powers and duties of an executor ?   10

Or,

What are the limitations imposed upon the Competency of a Hindu testator to bequeath his property ?—

7. Explain the following terms:—   10
Doctrine of Election, Bequest void for Uncertainty, Onerous bequest, Demonstrative legacy, and Unprivileged will.

Or,

Is an executor entitled to call upon the legatee to *refund* in the event of insufficiency of assets in the following two cases : (*a*) where the legacy has been paid by judicial order, and (*b*) where it has been paid voluntarily ?

8. Do the provisions of the Probate and Administration Act create   10 estoppel against the legal representatives of a Mahomedan testator ?

Or,

A Hindu widow applies for probate of the will of her deceased hus- 10 band.   Can the application be opposed by a remote reversioner of her husband, who has no present interest in the estate of the deceased ?

9. What is the legal position of a person, who, without being an executor, deals with the property as such ?   What is the measure of his liability, if any ?

10. State the rules regulating the domicile of (*a*) an illegitimate   10 child, (*b*) a married woman, and (*c*) a lunatic.

Or,

What are the rules for determining the construction of a will, which purports to make two bequests to the same person ?

CONTRACTS AND TORTS.

Paper-setter—KUNWAR SINGH, ESQ.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiners— { DR. S. K. GUPTA, M.A., B.L., B.LITT., PH.D.
{ BABU SASANKAJIBAN RAY, M.A., M.L.

1. Comment on :— 10
" The specific mark of Contract is the creation of a right, not to a thing but to another man's conduct in the future."

Or,

" Consideration means not so much that one party is profited as that the other abandons some legal right in the present or limits his legal freedom of action in the future as an inducement for the promise of the first."

2. State the theory of " Floating Obligation," and show with 10 reference to the case *Cartill* vs. *Carbolic Smoke Ball Company* or any other case you know, how the acceptance of an offer by advertisement may become real and binding in the eye of the law.

Or,

When do offer, acceptance and revocation, each made through the post respectively, become operative ? Illustrate by means of examples.

3. What do you understand by " *Agreements by way of Wager* "? 10 What, if any, force do such agreements possess ? Do you know of any exceptions to the rule ? How would you distinguish Contracts of Insurance from such agreements ?

Or,

What are the legal consequences of Fraud *or* Coercion on Contracts ? Explain the terms Fraud and Coercion as used in the law of Contract. Can these two grounds be pleaded (i) simultaneously, (ii) alternatively, by the defendant to defeat the plaintiff's suit on a Promissory Note ?

4. State the law relating to the joint or several liability of joint 10 promisors.

A, *B* and *C* jointly promise to pay *D* the sum of Rs. 3,000. *C* is compelled to pay the whole, *A* is insolvent, but his assets are sufficient to pay one half of his debts. How much is *C* entitled to receive from *A*'s estate and *B* respectively ?

Or,

What order is laid down by the law in which reciprocal promises are to be performed'?

Goods are sold for " cash on delivery " and the vendor delivers a portion of the goods. The purchaser offers to pay the price thereof if certain cross claims set up by him are adjusted. Is the vendor entitled to refuse delivery of the remaining goods ? Give reasons for your answer.

5. Under what circumstances may a Surety be discharged from   8
suretyship ?

Or,

State the extent of Agent's authority (i) under ordinary circum-
stances, and (ii) in an emergency.

SECOND HALF.

Examiners— { DR. SARATCHANDRA BASAK, M.A., D.L.
{ BABU RAJENDRACHANDRA GUHA, M.A., M.L.

6. State precisely and give an example to show the extent to which   10
a contractual liability incurred by one of the partners is binding on
the others.

Or,

State the law relating to the duties of the Bailees in respect of the
goods entrusted to their care. Is the Bailee liable for the loss by theft
of the goods bailed ?

7. "The old-fashioned distinction between *Mala prohibita* and   10
Mala in se is long since exploded." Illustrate this statement by
means of one example.

Or,

What do you understand by the "Natural and probable conse-
quence" of an act in Tort ? Give examples.

8. Discuss the master *M*'s liability in *any one* of the following   10
cases :—

(i) *M*, the owner of a horse and cart, left them unwatched in the
street. Some children came up and began playing about the cart,
and as one of them—the plaintiff in the suit—was climbing into the
cart, another pulled the horse's bridle, the horse moved on and the
plaintiff fell down under the wheel of the cart and was hurt.

(ii) *M*'s horse escapes into a public road and kicks the plaintiff
who is lawfully on the road.

(iii) *M*'s horse, by reason of a defective gate, strays into an ad-
joining field where there are other horses belonging to the plaintiff
and kicks one of those horses.

(iv) A carman was returning to his employer *M*'s office with re-
turned empties. A clerk of the same employer's who was with him
induced him when he was near home to turn off in another direction
to call at a house and pick up something for the clerk. While the
carman was driving in this direction he ran over the plaintiff.

9. Enumerate the conditions excluding liability for acts *prima*   10
facie wrongful; and explain and illustrate any one of them.

Or,

State the principles established in *Brown* v. *Kendall* or *Nitrogly-
cerine* case.

10. Give examples to show what you understand by *any one* of the   10
following terms as used in the law of Torts :—

(i) Contributory Negligence ;
(ii) Malice in law ;
(iii) Slander of Title ;
(iv) Act of State.

Final Examination in Law.

August, 1918.

LAND TENURES.

Paper-setter—Dr. Surendrachandra Sen.

*Candidates are required to give their answers in their own words
as far as practicable.*

Questions 6 and 7 are to be answered : of questions 1 to 5 answer
ANY THREE.

All questions carry equal marks.

First Half.

Examiners—{ Babu Surendranath Guha, M.A., B.L.
Dr. Surendrachandra Sen.

1. What rights were reserved by Government in favour of itself under
the Permanent Settlement Regulation (I of 1793) ?

Or,

Give shortly the substance of the preamble to Regulation II of 1793.

Or,

What lakheraj grants were declared valid by Regulation XIX of 1793 ?

2. " Under the Putni Sale Law (Regulation VIII of 1819) a putni is
sold free of all incumbrances that may have accrued upon it by act of
the defaulting proprietor." Explain and illustrate this rule.

Or,

On what dates are applications to be made for the first sale and the
mid-year sale under the Putni Sale Law ? and on what dates are the sales
held ? Is it necessary to pay the whole of the advertised balance to
prevent the mid-year sale ? If not. what portion of the arrear is to be
paid ?

3. Who are entitled to—
   (1) Lands gained by gradual accession from the recess of a large
        navigable river, and what is the extent of interest of the per-
        son entitled to the increment ?
   (2) Churs or islands thrown up in a large navigable river ?
   (3) Churs thrown up in small shallow rivers ?

4. *A* is the proprietor of a revenue-paying estate. *B* dispossesses *A*
and acquires a title to a part of the estate against *A* by adverse posses-
sion. *A*'s estate is sold for arrears of revenue under the Revenue Sale

Law (Act XI of 1859) and purchased by *X*. Is *X* entitled to recover from *B* the portion of the estate in regard to which he acquired a title by adverse possession against *A* ? Give reasons.

Or,

What do you understand by " Common Registry " and " Special Registry," and what are the special advantages when tenures are so registered under the Revenue Sale Law ? Give reasons.

5.   What was the king's share of the produce of the land in Hindu times ? What was the right which the king had in the lands comprised in his kingdom ? .   *Or,*

. Explain the following expressions: *Mukarari* tenure, *chakran* tenure, *ghatwali* tenure, *khudkast* raiyat, and *paikast* raiyat.

6.   Who is entitled to reformation on old site ? State and discuss shortly the law laid down by the Privy Council in the case of *Lopez* v. *Madan Mohon Thakur.*

7.   A co-tenant of a mine works it without the consent of the other co-tenant but without any assertion of hostile title. Is the co-tenant who works the mine accountable to the other co-tenant for the profits ? State and discuss shortly the law laid down in *Mahes Narain* v. *Nawabad Pattack* (1 C.L.J. 437).   *Or,*

Shortly state the law laid down by the Privy Council in the case of *Srinath* v. *Dina Bandhu* (41 I.A. 221).

SECOND HALF.

Examiners— { DR. JADUNATH KANJILAL, M.A., D.L.
{ DR. NARESCHANDRA SEN GUPTA, M.A., D.L.

(Questions 6 and 7 are to be answered : of questions 1 to 5 answer
ANY THREE)*.*

All questions carry equal marks.

1.   What are the different classes of tenants under the Bengal Tenancy Act ? What is the distinction between a tenure holder and a raiyat ?

Or,

What are the grounds of enhancement of rent of an occupancy raiyat ?

2.   What is an *abwab* ? How do you distinguish an abwab from rent ? Give illustrations. Is an abwab recoverable from a tenant ? Give reasons. ⌁

Or,

What is the distinction between a rent-decree and a money-decree ? Explain by giving illustrations.

3.   What are the grounds upon which a tenant can make a deposit of rent in the Civil Court ?

Or,

Does the Bengal Tenancy Act apply to the homestead holding of a raiyat when he holds the homestead otherwise than as a part of his agricultural holding as a raiyat ? What is the law applicable to the incidents of his tenancy of the homestead ?

Or,

When a tenure or holding is advertised for sale for an arrear of rent
due thereon, a person having an interest therein *voidable upon the sale*
may pay into Court the amount requisite to prevent the sale. Explain
this statement and give illustrations. What is the meaning of the words
" *voidable upon the sale* "?

4. " Nothing in this Act shall be deemed to prevent a proprietor or a
holder of a permanent tenure in a permanently settled area from grant-
ing a permanent mukarrari lease on any terms agreed on between him
and his tenant." (S. 179 of the Bengal Tenancy Act).

Explain this section and give illustrations.

Or,

What is the distinction between a settled raiyat and an occupancy
raiyat ?

5. Explain what are easements of necessity. What is the principle
on which easements of necessity are founded ?

Or,

How do you distinguish an easement from a license ? Explain why
public rights of way are not easements.

6. Does a person by the enjoyment of light for a period of twenty
years acquire an indefeasible right to the enjoyment of a *like amount* of
light in the future ? State and discuss shortly the law laid down by the
Privy Council in the case of *Paul* v. *Robson* (21 I.A. 180).

Or,

Is a non-occupancy raiyati holding heritable ? Shortly discuss the law
laid down in the case of *Midnapur Zemindary Co.* v. *Hrisikesh Ghosh*
(I.L.R. 41 Cal. 1108).

7. In the case of a testamentary devise of a non-transferable raiyati
holding, is the heir-at-law debarred by the doctrine of estoppel from ques-
tioning its validity ? State and discuss shortly the law laid down in
the case of *Amulyaratan Sircar* v. *Tarini Nath Dey* (I.L.R. 42 Cal. 254).

EQUITY.

Paper-setter—DR. S. C. BAGCHI, B.A., LL.B., LL.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiners—$\begin{cases} \text{DR. S. C. BAGCHI, B.A., LL.B., LL.D.} \\ \text{H. S. SUHRAWARDY, ESQ.} \end{cases}$

1. What is meant by equitable jurisdiction ? Explain how equity   10
became a system.

Or,

Explain how equity supplements law.

2. Write a note on the term ' use.' Why did the Courts ignore   10
uses in general ?

Or,

" In charitable trusts a very wide sense is given to the word ' charitable.' "—*Maitland.* Illustrate this remark by concrete instances.

3. " Equity will not assist volunteers." Discuss.   10

4. I buy a fee-simple estate, and I say to the vendor, I want you   10
to convey it not to me but to *X*. He conveys it unto and to the use
of *X*. What presumptions may arise according as *X* is or is not
related to me ?

5. *T* held a fund upon trust to pay the income to the widow of *X*   10
and divide the capital among the children of *X*. The widow is dead.
All the children are of full age. *T* assigns to each child his share.
What is the position of *T* after the assignment ?

SECOND HALF.

Examiners— { B. K. GHOSH, ESQ.
{ R. S. BAJPAI, ESQ.

6. ' Equity follows the law.'—**Explain.**   10

Or,

How far is possession notice of equities ?

7. Explain the rule in Clayton's case ?   10

Or,

Explain shortly the doctrine of ademption of legacies by portions.

8. Explain the rule in *Mason* v. *Bogg.*   10

9. *X* gives by his will all his personalty to *A*, *B* and *C* in equal   10
shares. *A* dies during *X*'s lifetime. Who will get the lapsed share of
A, and how are the debts of *X* to be paid, supposing (*a*) *A*, *B* and *C*
are not descendants of *X*, (*b*) they are *X*'s descendants.

10. *X* lends me money, and, in return, I write on a piece of paper,   10
" in consideration of £1,000 lent to me by *X*, I agree to execute a
proper mortgage of all any free-hold estates in the country of *Y* to
secure the repayment of the said sum with interest at 4%." Can
X go to the court simply on the strength of this note and ask for
foreclosure ?

EVIDENCE AND CIVIL PROCEDURE.

Paper-setter—TARAKCHANDRA CHAKRABARTI, ESQ.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

Examiners—
{ SIR DEBAPRASAD SARBADHIKARY, KT., C.I.E.,
   M.A., LL.D.
   BABU JOGESCHANDRA DE.

1. "The Evidence Act adopts the requirements of the prudent   10
man as an appropriate concrete standard by which to measure proof."
Explain and justify.   *Or,*

Discuss the merits of the system of judicial evidence which insists
upon the *vivâ voce* examination of witnesses in open Court.

2. The final judgment of a Court in the exercise of its Probate   10
jurisdiction decides (1) that the will was duly executed, (2) that the testator was not a tenant for life, (3) that *A* was not the testator's wife,
(4) that *B*, the executor named in the will, is a lunatic, and (5) that
C is an executor by implication and, as such, entitled to probate.
How far would this decision be regarded as a judgment *in rem* ?

Or,

A, representing that he has inherited a property on the death of
his uncle, induces *B* to purchase the same and pay the price. Thereafter the property is attached and sold in execution of a decree for
money against *A*, and purchased by *C* who obtains possession. In a
suit by *B* to recover the property from *C*, can the latter prove that
at the time of the sale by *A*, the uncle was living and that he died
just before the attachment ?

3. (*a*) "Of things that do not appear and things that do not exist,   10
the reckoning in a Court of law is the same."
Is it necessary to qualify the statement by any provision of the
Evidence Act ?

(*b*) How far is the statutory meaning of "Conclusive proof" retained in Sec. 112 dealing with legitimacy ?

Or,   •.

Indicate the nature of questions which even a willing witness would
not be permitted to answer.

4. (*a*) Does ignorance in any case keep alive a right which would   10
otherwise be extinguished by lapse of time ?

(*b*) Is the running of the time prescribed for a suit ever suspended
after it has once begun to run ?

5. *X*, a minor, having been dispossessed of a zemindary on the   10
1st of September, 1606, sold through his guardian a portion thereof
to an idiot *Y*, on the 5th of October, 1916, and died, while still a
minor, on the 10th of November, 1917, leaving his mother *Z* to inherit
the remainder. What would be the time allowed to *Y* and *Z* for in-

stituting suits to recover possession of their respective shares, the period of limitation being twelve years from the date of the dispossession ?

Or,

In a dispute arising on the re-appearance of submerged land, how would you deal with the period of submergence in connection with the question of discontinuance of possession or continuance of adverse possession, where both parties had successively held the land before it became submerged ?

SECOND HALF.

Examiners— { BABU HEMCHANDRA SEN, B.L.
           ,,   TARAKCHANDRA CHAKRABARTI.

6. (*a*) Annotate :—   10
     Cause of action ;
     Point of substance
     Right to begin ;
     Cross-objection ;
     Preliminary point.

(*b*) " The Code makes no provision for something which is neither a decree nor an order, nor for anything which is both."

Explain and illustrate.

7. The decision of a Munsiff against the validity of an adoption   10
was reversed on appeal by the Subordinate Judge. In a subsequent suit between the same parties, and before the same Subordinate Judge, an issue as to the adoption is again raised. Every other condition being satisfied, would the final judgment in the previous suit operate as a bar to the trial of the issue ?

Or,

In a suit between two brothers *B* and *C*, it was decided that the latter, having killed his father *A*, had not share in the paternal estate which was inherited by *B* alone. Afterwards *C* and his son *D* institute a suit to recover the estate from *B* on the strength of a deed executed by *A* whereby the whole estate was given in equal shares to *C* and *D* to the exclusion of *B*. Consider the effect of the judgment in the previous suit.

8. (*a*) Who can apply for setting aside an execution sale ?   10
(*b*) Indicate the nature and distinction of the remedies available to a person aggrieved by a decree.

Or,

(*a*) How can a person assert his right in case of wrongful interference with his immoveable property in execution of a decree against his neighbour ?

(*b*) " A man should not be left quite destitute of getting a living for himself and his family."

How far does the Code recognize the principle ?

9. A plaintiff obtains a decree for possession on the basis of a   10
lease. Pending an appeal by the defendant the lease expires. Would the Appellate Court, in dismissing the appeal, affirm the decree ?

Or,

A, the plaintiff, obtains a decree for possession of a house jointly occupied by B and C. On an appeal by B the decree is reversed and the suit dismissed. A files a second appeal in which B alone is the respondent. Can you take any preliminary objection to the hearing of the appeal?

10. How do you justify the decision in *Khiarajmal* v. *Diam* in view of the judgment in *Malkarjun* v. *Narhari*?   10

CRIMINAL LAW.

Paper-setter—MANMATHANATH MUKHERJEE, M.A., B.L.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Examiners— { BABU HARAPRASAD CHATTERJEE, M.A., B.L.
            { BABU MANMATHANATH MUKHERJEE, M.A., B.L.

1. What, according to the Indian Penal Code, are the meanings   10
of the following expressions?—

'Moveable property,' 'Wrongful loss,' 'Valuable security,' 'Criminal Force.'

When is a person said to make a false document?

2. (a) A finds a purse with money in it lying on a public road. He   10
picks it up, keeps it for a few days and then spends the money for
his own purposes. Under what circumstances would he be guilty of
any offence, and under what circumstances not?

(b) A, intending that X may be killed, instigates B to put poison
into the food of X and gives him poison for that purpose. B, in
consequence of the instigation, by mistake, puts the poison into the
food of Y which is by the side of that of X. Y takes the food but
does not die.

What offences, if any, are A and B guilty of? Give reasons.

3. Indicate the essential points of difference between:—   10

(a) 'Wrongful restraint' and 'wrongful confinement.'
(b) 'Murder' and 'Culpable homicide not amounting to Murder.'
(c) 'Theft' and 'Cheating.'

Or,

Discuss the extent and limitations of the right of private defence
of property.

4. To what extent are the following circumstances a good defence   10
in a criminal action?—

(a) Mistake of fact.
(b) Intoxication.

Or,

(*a*) Unsoundness of mind,
(*b*) Infancy.

What are the conditions of Criminality in English Criminal Juris 10
prudence ?

Or,

Give a short account of any English criminal case that you know
of and briefly discuss the principles deducible therefrom.

SECOND HALF.

Examiners— { J. BEROOAH, ESQ.
{ J. W. CHIPPENDALE, ESQ., M.A., B.L.

1. What are the respective functions of the Judge and the Jury 10
in a Sessions Trial ?

Or,

What are the powers of an Appellate Court in an appeal from a
conviction ?

2. (*a*) What do you understand by the expression 'Taking cogni- 15
zance of an offence' ?   What are the ways in which a Court can take
cognizance of an offence ?

(*b*) What are the restrictions imposed upon a Court in the matter
of taking cognizance of an offence of Criminal Conspiracy ?

3. To which Court, and under what circumstances, would an ap- 10
peal, if any, lie in each of the following cases ?—

(*a*) From a sentence of three years' rigorous imprisonment
passed by an Assistant Sessions Judge.
(*b*) From a sentence of three months' rigorous imprisonment
passed by a Presidency Magistrate.
(*c*) From an order of acquittal passed by a Magistrate of the
second class.
(*d*) From a sentence of whipping passed by a District Magistrate.
 e) From an order to give security for good behaviour passed by
a Magistrate of the First Class.

Or,

Briefly discuss the provisions of the law dealing with prevention
of offences relating to Disputes as to immoveable property.

4. What do you understand by the term ' Accomplice' ?   What 10
are the provisions of the law relating to tender of pardon to an Ac-
complice ?   How may such pardon be forfeited ?

Or,

State what would be the effect of a Magistrate doing the following
things in good faith, but not being empowered by law in that be-
half :—

(*a*) Trying an offender summarily.
(*b*) Withdrawing a case to his own file.
(*c*) Issuing a search-warrant.
(*d*) Demanding security for good behaviour.

5. Briefly describe the various steps that have to be taken under 10 the laws of England to bring an offender to justice, beginning from the lodging of information and up to the commencement of the trial.

Or,

Give a short account of the important changes in the Criminal Law of England since the days of the Revolution up to the present times.

I.C. Examination.

1918.

(Old Syllabus).

MATHEMATICS.

Examiners—
$\left\{\begin{array}{l} \text{Dr. Haridas Baghi, M.A., Ph.D.} \\ \text{S. N. Maitra, Esq., M.A.} \\ \text{Tulsicharan Bose, Esq., M.A.} \end{array}\right.$

First Paper.

Trigonometry and Mensuration.

*Candidates are required to give their answers in their own words
as far as practicable.*

First Half.

Answer any FOUR *questions.*

The questions are of equal value.

1. State Simpson's rule for determining the area of a curve.
Ordinates of a curve 1·5 inches apart are 2·30, 2·35, 2·46, 2·57, 2·42, 2·21, and 2·10.
Find the area between the first and last ordinates.

2. The radius of a circle is 12 ft. Find the length of the side of a polygon of sixteen sides inscribed in it. Calculations to be made to three places of decimals.

3. (a) Find the area of a segment of a circle in terms of the chord and the height.
(b) The span of a bridge, the form of which is an arc of a circle, being 96 ft., and the height 12 ft., find the radius.

4. A right-angled triangle, of which the sides are 5 and 12 inches in length, is made to turn round its hypotenuse: find the superficial area and the volume of the double cone thus formed.

5. What is a prismoid ?
The bottom of a tank is a square whose area is 1 acre; its depth is 10 ft., and the side slopes are 1¼ to 1; find the number of cubic feet of water it would contain.

6. A sphere of 4 ft. radius has to have a cylinder of 2 ft. radius put through it centrically. Find the volume of the sphere that has to be cut out ($\pi = 3\cdot1416$).

Second Half.

Answer any FOUR *questions.*

The questions are of equal value.

1. Multiply 283·456286 by 1·4321 by contracted methods (to three places of decimals); and shew, by general reasoning, that the product will not be affected up to the 3rd decimal place, when the multiplicand is increased or diminished by ·000013.

2. The formula

$$p = \frac{P}{(2 \cdot 718)^{\frac{a}{26000}}}$$

gives the atmospheric pressure p in lbs. per sq. inch at a height a ft. above sea-level, P being the pressure (in lbs. per sq. in.) at the sea-level. Calculate, with the help of a log table, the pressure of the atmosphere at Darjeeling, 7 800 ft. above sea-level. [Take the air-pressure at sea-level to be 15 lbs. per sq. in.]

3. Find the exact value of the series

$$\frac{1}{3} + \frac{1}{3^2} + \frac{1}{3^3} + \quad . \quad . \quad . \quad \text{to} \infty,$$

and compare the errors introduced, if we stop at the 10th and 20th terms successively.

4. A survey-line is run 3·010 chains from A to B, and 7·224 chains from B to C. If the distance of C from A be 7·826 chains, prove that ABC is a right angle, and compute the other two angles BAC, ACB (to the nearest minute).

5. The number of cubic feet of gas delivered every hour by a gas-service pipe is

$$1000 \sqrt{\frac{d^5}{0 \cdot 45 \, L}},$$

where d is the diameter of the pipe in inches, and L is the length of the pipe in yards. What must be the diameter of the gas-pipe connecting the main to a house 75 ft. distant, so as to feed five burners, each consuming 5 cub. ft. of gas per hour ?

[The result is to be correct to the 2nd decimal place.]

6. Write a short note on the system of *common* logarithms, and point out its special advantages. If an integer consists of N digits, prove that the characteristic of its logarithm is $N-1$.

Determine the number of digits in the expression

$$2^{31} \times 3^{14} \times 5^4.$$

[Use a log table to get the necessary logarithms.]

MATHEMATICS.

SECOND PAPER.

STATICS, DYNAMICS AND APPLIED MECHANICS.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Only THREE *questions to be attempted.*

The questions are of equal value.

1. Find the conditions under which three co-planar forces must act on a rigid body to keep it in equilibrium.

A uniform rod, 4 inches in length, is placed with one end inside a smooth hemispherical bowl, of which the axis is vertical and the radius $\sqrt{3}$ inches; shew that a quarter of the rod will project over the edge of the bowl.

2. Given the centre of gravity of a body and that of a part of it; find the centre of gravity of the remainder.

A uniform plate of metal, 10 inches square, has a hole of area 3 sq. inches cut out of it, the centre of the hole being 2·5 inches from the centre of the plate; find the position of the centre of gravity of the remainder of the plate.

3. Find the maximum horizontal range and the corresponding direction of projection for a particle projected with a given velocity under gravity.

A cannon ball is shot horizontally from the top of a tower 49 feet high, with a velocity of 2000 ft. per second. Find at what distance from the tower the cannon ball will strike the ground.

4. Determine the rate in H.P. at which an engine must be able to work in order to generate a velocity of 10 miles per hour on the level in a train of mass 69 tons in three minutes after starting, the resistances to the motion being taken at 10 pounds per ton.

5. A railway carriage moves on a circular curve; find to what height the outer rail must be raised above the inner so that there may be no lateral thrust on the rails if the radius of the curve be 1320 ft., the breadth between the rails 5 ft., and the carriage have a velocity of 45 miles per hour.

SECOND HALF.

Not more than THREE *questions to be attempted.*

6. Explain the terms;—stress, strain, Young's modulus, modulus of rigidity.

A mild steel bar, twelve inches long and 1·5 inches diameter, is subjected to a pull of 18 tons. If the extension is ·0094 inch, find E.

7. A beam, span l ft., is simply supported at the ends and subjected to a uniformly distributed load of w tons per foot run. Find the maximum bending moment and draw the bending moment and shear diagrams.

8. Explain the terms :—Moment of inertia, and radius of gyration.

A cast-iron girder has an upper flange $2'' \times 1\frac{1}{2}''$, a lower flange $6'' \times 1\frac{1}{2}''$, and a web $7'' \times 1''$. Find its moment of inertia and radius of gyration about an axis through the centroid parallel to the flanges.

9. State the formulae for deflection in the following cases :—

    (a) Cantilever with load at free end.

    (b) Cantilever with uniformly distributed load.

    (c) Beam with load in the centre.

    (d) Beam with uniformly distributed load.

What will be the reflection of a $12'' \times 8''$ teak beam 8 ft. long under a transverse load of 8 tons distributed ?

$$E = 1728000 \frac{lbs.}{in^2}.$$

MATHEMATICS.

THIRD PAPER.

DIFFERENTIAL AND INTEGRAL CALCULUS.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

The questions are equal value.

Only SEVEN *questions to be attempted, of which any three should be chosen from the First Half and any* FOUR *from the Second Half.*

1. Find the radii, and the distance between the centres, of the circles

$$x^2 + y^2 + 2g_1x + 2f_1y + c_1 = 0,$$
$$x^2 + y^2 + 2g_2x + 2f_2y + c_2 = 0.$$

Express the fact that the distance between the centres may be equal to the sum or difference of the radii, and hence or otherwise obtain the condition of contact of the circles.

2. Taking the principal axes as axes of coordinates, express the equation of an ellipse in the form

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1.$$

Find the values of the constants a and b so that the ellipse may pass through two given points (x_1, y_1) and (x_2, y_2). Under what condition will the conic pass through a third given point (x_3, y_3) ?

3. Define the *differential coefficient* of a function, and find the simplest value of the differential coefficient of each of the expressions :—

    (i) $1 + x + \dfrac{x^2}{\lfloor 2} + \dfrac{x^3}{\lfloor 3} \ldots .$ to infinity.

    (ii) $28 \cdot 5731 + \tan^{-1}x + \cot^{-1}x + \left(\dfrac{1 - \tan^2x}{1 + \tan^2x}\right)^2 + \left(\dfrac{2 \tan x}{1 + \tan^2x}\right)^2.$

4   Establish Maclaurin's theorem on the expansion of a function, and hence or otherwise expand

$$\sin x \text{ and } \sin (x + 60°)$$

in powers of x.

[*The first four terms are required in each case*].

SECOND HALF.

5.   Perform the following integrations :—

$$\text{(i)} \int \frac{dx}{x} ; \qquad \text{(ii)} \int x^n \, dx ;$$

$$\text{(iii)} \int (x + x^2 + x^3 + \ldots \text{to} \infty) \, dx.$$

6.   Explain the principle of *integration by parts*, and hence, or by any other method, evaluate the integral

$$\int_0^a x \sin x \, dx.$$

Prove that the integral will vanish, when a satisfies the relation *tan a=a*.

7.   Define Moment of Inertia.

Find the moment of inertia of a metal disc of mass m about an axis passing normally through its centre.

8.   Evaluate :—

(i) $(\sin x)^{\tan x}$, when $x=0$.

(ii) $\dfrac{2x^3 - 3x^2 + 1}{3x^5 - 5x^3 + 2}$, when $x=1$.

9.   Define eccentric angle of a point on an ellipse.   Find the equation to the normal at any point on an ellipse in terms of the eccentric angle.

CHEMISTRY.

FOURTH PAPER.

Examiners— $\begin{cases} \text{R. N. SEN, Esq., M.A.} \\ \text{N. BRODIE, Esq.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

Not more than THREE *questions to be attempted in each half.*

All questions carry equal marks.

FIRST HALF.

1. Write a short account of the Ionic Theory. Explain how the ionic theory accounts for the following : —

(a) magnesium hydrate is not precipitated by ammonia in presence of ammonium chloride ;

(b) by ordinary tests iron cannot be detected in potassium ferrocyanide solution, but aluminium can be detected in alum solution ;

(c) the solution of a salt like sodium carbonate gives alkaline reaction.

2. What is an explosion, and what are the best conditions for a violent explosion ?

Calculate the maximum theoretical pressure of explosion of a mixture (at N.T.P.) of 28 grams of carbon monoxide and 16 grams of oxygen from the following data :—

$$CO + O = CO_2 + 67{,}700 \text{ cals.}$$
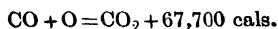
and the specific heat of $CO_2 = 0.15$.

3. Enumerate the chief sources from which the following metals are obtained : lead, zinc, tin, and copper. Describe briefly the methods by which any one of these is produced from its ores.

4. Describe the preparation, properties and uses of the following :—

Plaster of Paris, Soluble glass, Bleaching powder, and Red lead.

5. What are the most important pigments used in making white paint, and how are they obtained ? Discuss the advantages and disadvantages of each.

SECOND HALF.

1. Describe and explain the changes that occur when the following substances are freely exposed to the air :—

(1) Lead, (2) Caustic soda, (3) Sulphuretted hydrogen water, (4) Iron, (5) Linseed oil.

2. Describe and explain the process of manufacture and the industrial use of calcium carbide.

3. What are the principal harmful impurities found in boiler water ? Explain, giving equations,

(1) in what way they are harmful ;

(2) how they can be removed.

4. Give an account of the Chemistry of the manufacture of Portland cement. What sorts of natural limestone can be used after burning, as a substitute for Portland cement ? Explain why pure limestone cannot be used in this way.

5. Describe and explain the effect of passing an electric current through a solution of copper sulphate.

PHYSICS.

FIFTH PAPER.

Examiners— { S. N. MAITRA, ESQ., M.A.
{ TULSIDAS KAR, ESQ., M.A.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Only FOUR questions to be attempted.

The questions carry equal marks.

1. Enunciate the First Law of Thermodynamics.

You are given card-board tube and a quantity of lead shots. Explain how would you arrange and perform an experiment with the help of these to verify the law in a rough and ready way.

2. Find the height from which a lump of ice at 0°C must fall so that it completely melts.

$$[g = 981 \text{ ft.}/_{\text{sec.}^2}, \; J = 4 \cdot 2 \times 10^7 \text{ ergs.}]$$

3. Prove the following thermodynamic relations :—

(i) $pv^\gamma =$ constant.

(ii) $E_\phi = \gamma \cdot E_t$,

where $\gamma =$ ratio of the specific heats of a perfect gas and E_ϕ, E_t are its elasticities.

4. Establish the differential equation for the linear flow of heat along a bar when the ' steady state ' is reached.

5. Describe and explain *either* Searle's *or* Forbes' method of finding the conductivity of a metal bar.

6. A wire whose resistance per centimeter length is ·1 ohm is embedded along the axis of a cylindrical cement tube of radii ·05 cm. and 1·0 cm. An electric current of 5 amps. is found to keep a steady difference of 125°C between the inner and outer surfaces. What is the conductivity of the cement, and how much heat must be supplied per cent. meter length ?

SECOND HALF.

Only THREE *questions to be attempted.*

The questions are of equal numerical value.

1. What is meant by the magnetic length of a magnet? Explain how it can be experimentally determined with the magnetometer, and prove the formula to be used.

2. State and prove Gauss's theorem on total normal induction, and apply it to prove that the flux of force is constant throughout a tube of force.

3. Describe any accurate method for measuring high resistances.

A battery of E.M.F. 50 volts is connected to a proportional galvanometer through a graphite resistance and the deflection and the galvanometer is noted. When a megohm is substituted for the graphite resistance, the galvanometer is to be shunted by a resistance of 50 ohms to get the same deflection as before. Calculate the value of the graphite resistance, the resistance of the galvanometer being 200 ohms.

4. The electrodes of a quadrant electrometer are connected to the terminals of a battery of 5 cells in series. In what ratio will the deflection of the needle be altered, if the electrodes are *also* jointed to the terminals of a battery of 3 cells in series similarly arranged, all the cells being alike, and the connecting wires thick?

5. State and explain Lenz's law on electromagnetic induction and show that it is consistent with the principle of conservation of energy.

Explain clearly why the oscillations of the coil of a moving coil galvanometer are damped by short circuiting the instrument.

SIXTH PAPER.

MATERIALS OF CONSTRUCTION.

Examiners— { D. R. G. TURNBULL, ESQ. { H. F. DAVY, ESQ.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

The questions are of equal value.

Only FOUR *questions to be attempted.*

What timbers are generally used in Bengal? Name them, mentioning works for which each is specially suitable.

2. What do you understand by the "Natural bed of a stone"? How should it be placed in a building? Give reasons for your answer.

3. What are the characteristics of First Class Bricks? How would you select them?

4. Describe Lime Stone. Can it be used as a roofing material ? Give reasons for your answer.

5. What stones are suitable for Road Metal ? Describe them, and state the sources from which Calcutta Engineers obtain them.

SECOND HALF.

FOUR questions only to be attempted.

All the questions carry equal marks.

1. What is the difference between a hydraulic lime, a natural cement, and a Portland cement ? Name the materials from which Portland cement is made, and outline a process for manufacturing. Can Portland cement be made by an engineer in charge of construction if suitable materials are available ?

2. Describe with sketches the process of manufacturing cast iron from the ore.

3. How do white cast iron, gray cast iron, steel and wrought iron differ from each other in composition and physical properties ?

4. What materials are necessary for making (a) fire-brick, (b) terra-cotta ware, (c) roofing tiles ? Describe any process you know for making one of the three classes of articles named.

5. What are the causes of corrosion in iron and steel ?

Name the essential properties of a good paint. Linseed oil is the usual " vehicle " for paints. Why is a mineral oil having the same appearance unsuitable although it would be cheaper ?

What precautions must be observed before painting a steel girder ?

SEVENTH PAPER.

DETAILS OF CONSTRUCTION.

Examiners— $\begin{cases} \text{I. H. RICHARDSON, Esq.} \\ \text{W. J. KEIR, Esq.} \end{cases}$

Attempt only FOUR *questions in* EACH *half.*

Your own ideas are wanted. The examiners will not be impressed by your reproducing pages of text-book from mere memory.

Read each question carefully BEFORE *you answer it.*

All questions carry equal marks.

FIRST HALF.

1. Mr. Gardner considers that the system of assuming the dead and live loads on roofs and floors to be equal to a dead load of 1½ cwts. per square ft. of floor area defeats its own object in the case of foundations of ordinary buildings. Confirm or refute his idea, explaining your views by calculations in an assumed case.

2. Give sketches to show how you would construct a reinforced brick roof of a span of about 18 feet. (Calculations are not required.)

3. Show by sketches how you would provide for drainage in the case of a hill road for pack animals and foot passengers.

4. Draw sketches of a pipe culvert for a first-class road and show how you would calculate the length of the pipe and also the length of the return walls.

5. What surface would you advise for roads such as—

(a) the Strand Road, Calcutta;
(b) Dalhousie Square;
(c) a first-class road in Chota Nagpur;
(d) a first-class road in Dacca;
(e) a third-class district road;

giving your reason in each case ?

SECOND HALF.

1. Make a sketch showing how the Basement of a house should be constructed, the floor of which is 6′ below the ground level, in damp clay soil.

2. Make a diagrammatic sketch showing the arrangement by which the syphonage of the traps to sanitary fittings is prevented in the case of a three-storied dwelling house having a W.C. on each floor.

3. Draw in plan and section to $1\frac{1}{2}''$ scale a doorway 4′ × 8′ in an external wall, showing lintel and chowkats, wall plastered internally and brick, faced externally. Doors to be 4-fold glazed panel doors opening inwards, and 2-fold Venetian shutters opening outwards.

One half of plan to show doors and shutters closed, and the other half showing them open and folded back against wall.

4. Make sketches of 4 different joints used in Carpentry with which you are familiar, and explain where used, and their advantages.

5. A bridge is to be finished with a stone balustraded parapet; show by sketches the dowels, cramps and joggles to give additional strength to the joints you would use in fixing this work.

In the case of metal connections, what precautions are necessary ?

EIGHTH PAPER.

ESTIMATING.

Examiners— $\begin{cases} \text{D. R. G. TURNBULL, ESQ.} \\ \text{RAI S. B. MAJUMDAR, BAHADUR.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

N.B.—*Candidates must answer the* FIRST THREE, *and any* ONE *of the other questions.*

Find cost of the following items of work to the building in Plate A attached.

1. Brick in lime in foundation and plinth @ 34/-/- per hundred cubic feet.   30

2. Priming 1 coat all wood and iron work @ -/8/- per hundred superficial feet.   25

3. Teakwood work in door and window frames @ 7/-/- per each cubic foot.   20

4. Brick in lime in Superstructure @ 35/12/- per hundred cubic feet.   25

5. 1½″ Teak panel doors @ 1/10/6 per each superficial foot.   25

SECOND HALF.

From the accompanying Longitudinal Section find out the quantity of earthwork for a kucha road, the formation line being given.   100
Width of road both in cutting and embankment to be 10 feet with side slopes 1 to 1. The land is horizontal transversely.

— LONGITUDINAL SECTION. —

46·75   FORMATION LINE 46·75

50·00	46·75	52·50	46·50	45·00	40·65	46·75
0	100	200	300	350	400	500 FEET
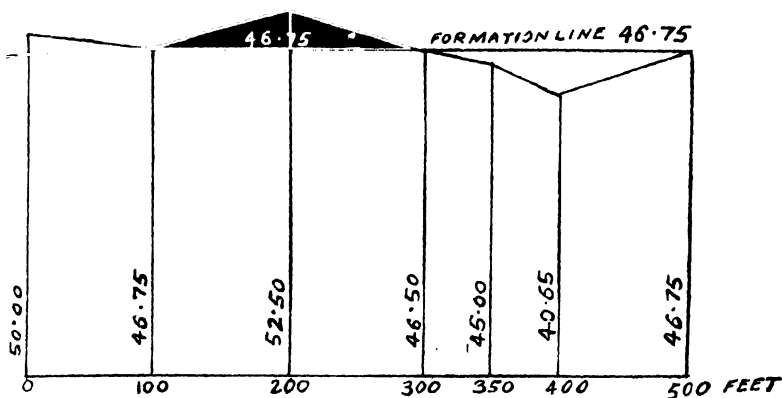
HORIZONTAL SCALE - 100 F.T = 1 INCH.
VERTICAL SCALE - 20 F.T = 1 INCH.

NINTH PAPER.

SURVEYING.

Examiners— { RAI AMARNATH DAS, BAHADUR, B.E.
{ BABU RAMRANJAN GHOSH.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only FOUR *questions are to be attempted from each half.*

The questions are of equal value.

FIRST HALF.

1. If you have to survey a large plot of land with many obstacles with the chain only, what considerations must you specially attend to when fixing your station points ?

2. Compare step by step the points of operation which explain the greater precision of work by Theodolite Traverse over that by Prismatic Compass.

3. What methods would you adopt for checking your work when conducting a Plane Table Survey ?

4. Explain the relation between the upper bubble and the line of sight, and describe with sketches how you would correct it if it was out of order.

5. Two straight lines AP and BP intersect at P making an angle APB 129° 17′. If you are supplied with a Theodolite and a 100 ft. chain,

describe how you would set out a curve of 2000 ft. radius tangential to *AP* and *BP*. Work out the necessary calculations.

Or,

What do you understand by subtense measurement.? Describe the method of working.

SECOND HALF.

6. State the precautions necessary to ensure accuracy when using the plane table.
7. What is meant by "repetition" in taking angles by a theodolite? What errors does repeating of angles eliminate?
8. How would you find the horizontal distance between two points 500 feet apart but which are placed at a difference of 40 feet in level. Describe briefly the different methods and say which of them is expeditious and which is most accurate.
9. What surveys are necessary in preparing a Road project?
10. How would you measure the base line for a Trigonometrical survey, and how do you reduce it for purposes of plotting?

TENTH PAPER.

DRAWING.

Examiners— $\begin{cases} \text{D. R. G. TURNBULL, ESQ.} \\ \text{W. J. KEIR, ESQ.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

N.B.—*Answer the* FIRST *and any one of the other questions.*

1. Draw to a scale of $\frac{1}{8}''$ to a foot the Elevation on AB, which is at   60
45° with the Vertical plane, of the building in the attached plate.
2. Illustrate by clear sketches any five of the following, together   40
with parts of the building in which they occur:—

    (*a*) Architrave moulding,   (*b*) Archivolt moulding,
    (*c*) String course,   (*d*) Quoin,
    (*e*) Wall plate,   (*f*) Buttress,
    (*g*) Pilaster,   (*h*) Frieze.

3. Draw plan and elevation of a circle of $1\frac{1}{2}''$ diameter with its   40
plane vertical and inclined to the Vertical plane at 45°.

SECOND HALF.

                                                  40

1. Shew in isometrical projection a section of:—
    (*a*) A steel girder $12'' \times 5''$ carrying steel joists $4'' \times 1\frac{3}{4}''$ spaced 4' ft. apart, upper flanges flush, and secured with lugs and bolts.
    (*b*) Shew same with members dissociated.

2. Draw full size or to a large scale the plan and elevation of a $\frac{3}{4}''$ 20
diam. bolt 9″ long with a hexagonal nut screwed on at one end, and
lying on the horizontal plane at an angle of 45° with the Vertical
plane.

3. Make a rough pencil perspective sketch of : —   20

A table with a cylinder standing vertically in its centre.   20

4. Answer one only of the following : —

(a) Inscribe 3 circles in a spherical triangle, each touching one
side and two circles.

(b) Inscribe within any regular polygon as many semi-circles as
the figure has sides, each touching one side and having their
diameters adjacent.
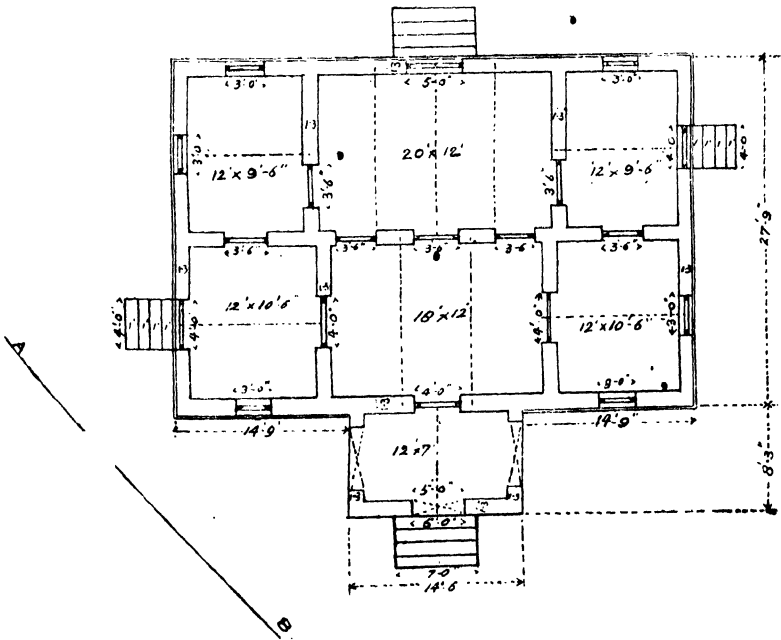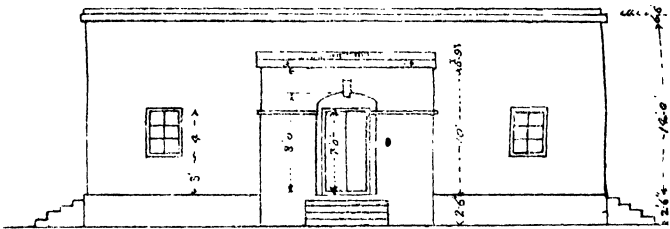
I.C. Examination.

1918.

(Section A).

MATHEMATICS.

First Paper.

Answer any EIGHT *questions.*

The questions are of equal value.

1. Find the magnitude and direction of the resultant of two forces P and Q, inclined at an angle a to each other.

If
$$P = \left(\frac{1}{3} + \frac{1}{3^2} + \frac{1}{3^3} + \dots \text{ to } \infty \right) \text{ lbs. wt.},$$

$$Q = 2 \left(\frac{1}{5} + \frac{1}{5^2} + \frac{1}{5^3} + \dots \text{ to } \infty \right) \text{ lbs. wt.},$$

a is an acute angle, whose sine

$$\pm \frac{\sqrt{5}-1}{2}.$$

prove the resultant must bisect the angle between P, Q, and find its magnitude (in lbs wt.), correct to 3 decimal places.

2. Establish Lami's theorem that, if three forces, acting on a rigid body, produce equilibrium, each is proportional to the sine of the angle between the other two.

A body is in equilibrium under the action of three forces x grms. wt., y grams. wt., and z grams. wt., satisfying the relation
$$x^2 + y^2 + z^2 = yz + zx + xy.$$

Prove that the three forces are equally inclined to one another.

3. Define the *moment of a force round a point*, and draw the necessary inferences, when the moment of a force about

    (i) a single point, is zero,
    (ii) each of two given points, is zero,
    (iii) each of three given points, is zero.

The moments of a force F (taken with proper signs) round two points A and B are equal and opposite. Prove that the line of action of F must bisect the line AB.

4. Obtain the conditions of equilibrium of a rigid body acted on by a number of a parallel forces.

A body is in equilibrium under the action of four parallel forces P, Q, R, S, of which P, Q, R act in the same sense, and S in the opposite sense.

If
$$Q = (1 + 2 + 3 + \ldots + 30) \text{ lbs. wt.},$$
$$R = (1^2 + 2^2 + 3^2 + \ldots + 30^2) \text{ lbs. wt.},$$
$$S = (1^3 + 2^3 + 3^3 + \ldots + 30^3) \text{ lbs. wt.},$$

calculate the magnitude of P.

5. Multiply (by contracted methods) 31·483241 by 2·3456, retaining three places of decimals. And verify that the quantity ·00004, added to, or subtracted from, the multiplicand, does not affect the final product up to the 3rd decimal place.

6. After a careful calibration, it is found that the discharge D gallons per minute over a certain weir obeys the relation

$$D = 20 \, H^{1.48},$$

where H is the head of water in feet above the sill of the weir. Calculate, by means of a log table, the head necessary to discharge ·062 gallon of water per second.

7. An arch in the form of an arc of a circle 40 feet in diameter crosses a stream 30 ft. wide. Calculate, to the nearest inch, the entire length of the arch, and its height at the centre of the stream.

8. A surveyor gives the following dimensions of a triangular field ABC:—$AB = 1100$ links. $BC = 1250$ links, $CA = 1400$ links. Calculate the area of the field; and find the discrepancy in the result on the assumption that an error (additive) of $\frac{1}{5}$ per cent. has been made in each measurement.

9. A railway cut through a hill is in the form of a rectangular parallelopiped, whose dimensions are 31 metres, 8·2 metres, and 1·7 metres respectively. Find the volume of earth removed in constructing the railway.

If this earth *just* suffices to fill up a ditch 22 metres long and 9·1 metres broad, determine the depth of the ditch (to the nearest centimetre).

10. Quote the formula for the volume of a *hollow* cylinder, whose dimensions are given.

An iron roller is in the shape of a hollow cylinder, whose length is 4 ft., external diameter 2 ft. 8 in., and thickness 4 inches. Find the weight of the roller (in pounds), supposing one cubic ft. of iron to weigh 486 lbs.

11. Assuming the ordinary formulæ for the volume (V) and superficial area (S) of a sphere, establish the identity

$$3 \log S = 2 \log 6 + \log \pi + 2 \log V.$$

Hence or otherwise, calculate the area of the surface of a spherical ball, whose volume is 512 cubic feet.

$$\left[\text{Take } \pi = \frac{22}{7}. \right]$$

12. There are n cones, the radii of whose circular bases are $r, 2r, 3r, \ldots nr$ respectively. If the corresponding altitudes be $h, 2h, 3h, \ldots nh$, prove that the sum total of the volumes of all the cones is

$$= \tfrac{1}{3} \pi r^2 h \cdot \left[\frac{n(n+1)}{2} \right]^2.$$
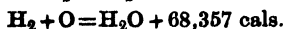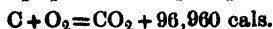
MATHEMATICS.

SECOND PAPER.

*Candidates are required to give their answers in their own words
as far as practicable.*

Note more than EIGHT questions are to be attempted.

The questions carry equal marks.

FIRST HALF.

1. Find from first principles the differential coefficient of cos x. Given that

$$y = \log \sqrt{\frac{1 - \cos x}{1 + \cos x}},$$

find the value of $\dfrac{dy}{dx}$.

2. Find $\dfrac{dy}{dx}$ in the following:—

   (i) $x^3 + y^3 - 3axy = c$,

   (ii) $x \log y - y \log x = 0$.

3. Prove Maclaurin's theorem without assuming Taylor's theorem. Expand cos x.

4. If $u = (\sin^{-1} x)^2$,

prove that

$$(1 - x^2) \frac{d^2u}{dx^2} - x \frac{du}{dx} = 2.$$

5. Find the limiting values of :—

$$\frac{x - \sin x}{}, \text{ when } x = 0,$$

   (ii) $(\sin x)^{\tan x}$, when $x = \dfrac{\pi}{2}$.

SECOND HALF.

6. Explain how to find the minimum value of $f(x)$.
Investigate for what values of x the following function has got a real maximum or a minimum :—

$$y = \frac{x^2 - 7x + 6}{x - 10}.$$

7. Find the co-ordinates of a point which divides in a given ratio $(l : m)$ the line joining two given points

$$(x_1, y_1) \text{ and } (x_2, y_2).$$

Prove that the lines joining the middle points of opposite sides of a quadrilateral and the line joining the middle points of its diagonals meet in a point and bisect one another.

8. Find the perpendicular distance of the point (x_1, y_1) from the line whose equation is

$$x \cos a + y \sin a = p.$$

Find the perpendicular distance of the point $(1, 3)$ from the line

$$12x - 5y - 10 = 0.$$

9. Find the condition that the equation

$$ax^2 + 2hxy + by^2 + 2gx + 2fy + c = 0$$

may represent two straight lines.

For what value of λ does the equation

$$\lambda xy + 5x + 3y + 2 = 0$$

represent two straight lines ?

10. Find the locus of the middle points of a system of parallel chords of a circle.

Find the pole of the line

$$4x + 6y - 7 = 0$$

with respect to the circle whose equation is

$$x^2 + y^2 = 35.$$

11. Find the locus of the point of intersection of two tangents to a parabola which are at right angles to one another.

PHYSICS.

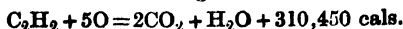*Examiners*—$\left\{\begin{array}{l}\text{S. N. Maitra, Esq., M.A.}\\\text{Tulsidas Kar, Esq., M.A.}\end{array}\right.$

Candidates are required to give their answers in their own words as far as practicable.

Only THREE *questions to be attempted in each half.*

The questions are of equal numerical value.

First Half.

1. Show how the coefficient of cubical expansion of a liquid may be found by weighing in the liquid and in air, a solid the coefficient of linear expansion of which is known.

2. Assuming Boyle's law to hold good, show that the coefficient of pressure increase at constant volume is equal to the coefficient of volume increase at constant pressure.

The pressure upon a gas is doubled, and at the same time its temperature is raised from 13°C to 299°C. How does this affect its volume ?

3. Give an account of Callendar's compensated air thermometer.

4. Give the theory of Bunsen's ice calorimeter.

0·484 grm. of a metal at 100°C is dropped into a Bunsen's calorimeter and the thread of mercury moves backwards through 1·21 cms. in the capillary tube, the diameter of which is 0·6 mm.   Assuming that 881 heat units are required to cause a contraction of 1 cc., find the specific heat of the metal.

5. Describe Joly's steam calorimeter.

A kilogramme of ice is taken at −10°C and heat is continually applied to it until a temperature of 1000°C is attained.   Trace the successive effects produced, stating the amount of heat required for each of these effects.

Specific heat of ice =0·5, heat of steam =0·48.

SECOND HALF.

1. Describe Victor Meyer's method of measuring vapour density.

Calculate the vapour density if in an experiment by this method we have the weight of liquid =0·12 grm.; volume of air driven off and collected over mercury = 38 cc.; temperature of air =15°C; height of barometer =75 cms.

2. Describe a method of determining the speed of light through air.

3. Calculate the focal length of a lens which would produce an image 6 ft. square of a lantern slide 3 inches square, the screen on which the image is to formed being 20 ft. from the lantern.   Show by means of a diagram how the slide would have to be placed to give an erect image on the screen.

4. Compare the relative merits of Ramsden's and Huygen's eyepieces. Give the theory of one of them.

CHEMISTRY.

$Examiners-$ $\left\{\begin{array}{l} \text{R. N. SEN, ESQ., M.A.} \\ \text{N. BRODIE, ESQ.} \end{array}\right.$

Candidates are required to give their answers in their own words as far as practicable.

Not more than THREE *questions to be attempted in each half.*

All questions carry equal marks.

FIRST HALF.

1. Explain by examples what is meant by exothermic and endothermic compounds and compare their stability.   Calculate the heat of formation of acetylene gas from the following data :—

$$C_2H_2 + 5O = 2CO_2 + H_2O + 310,450 \text{ cals.}$$
$$C + O_2 = CO_2 + 96,960 \text{ cals.}$$
$$H_2 + O = H_2O + 68,357 \text{ cals.}$$

2. What do you understand by the calorific power and the evaporative power of a fuel ?

Describe briefly the preparation of producer gas. What is its composition ?

3. Briefly describe any commercial method of preparing chlorine. What are its characteristic properties and its chief uses ? Give the tests for chlorine.

4. Explain the modern processes adopted for the smelting of lead from galena and in the desilverisation and softening of the crude metal.

Give the names, composition and uses of the important alloys of lead.

5. Describe the preparation, properties and uses of the following :— Copper Sulphate, Alum, Zinc Chloride and Potassium Permanganate.

SECOND HALF.

1. $35 \cdot 1$ c.c. of $\dfrac{N}{2}$ sulphuric acid solution are required to neutralise one gram of impure sodium carbonate. Calculate the percentage purity of the sodium carbonate. How many grams of sulphuric acid are there in a litre of $\dfrac{N}{2}$ solution ?

2. 10 litres of a gaseous hydrocarbon at 27°C and 750 mm. weigh 6·4145 grams. Calculate the formula of the gas and give its name and a short account of its properties.

3. Express by equations the action of nitric acid on (1) Copper, (2) Red Lead, (3) Calcium Carbonate, (4) Ferrous Sulphate, (5) Sodium Chloride and (6) Tin. Name the products formed in each case.

4. Give brief examples of the use of coke in the reduction of metals from their ores. Why cannot aluminium be obtained in this way ?

5. Give an account of the industrial uses of the different allotropic forms of carbon.

𝕭.𝕰. 𝕰xamination.

1918.

(Old Syllabus).

MATHEMATICS.

Examiners— $\begin{cases} \text{P. Gangooly, Esq., M.A.} \\ \text{S. N. Maitra, Esq., M.A.} \\ \text{Babu Tulsicharan Bose, M.A.} \end{cases}$

' First Paper.

Candidates are requird to give their answers in their own words as far as practicable.

All the questions arc of equal value.

Not more than THREE *questions to be attempted from each half of the paper.*

First Half.

1. Prove that the resolved accelerations of a point in polar coordinates are

$$\ddot{r} - r\dot{\theta}^2 \text{ and } \frac{1}{r}\frac{d}{dt}\left(r^2\dot{\theta}\right).$$

Hence shew that in the case of uniform motion in a circle the resultant acceleration is directed towards the centre of the circle and is equal to the radius multiplied by the square of the angular velocity.

2. Prove that the path of a projectile is a parabola if air-resistance be neglected.

A gun fires a shot with velocity 800 ft./sec. to hit an object 800 ft. above the point of projection, and at a horizontal distance $9000\sqrt{3}$ ft. from it. At what elevation should the gun be pointed ?

3. A uniform, heavy inextensible string hangs freely under the action of gravity. Find the equations of the curve which it forms.

4. Find the centre of pressure of a triangle immersed in a liquid with its vertex in the surface and its base horizontal.

5. Assuming that the temperature in the atmosphere is constant, prove that the relation between the pressure and height above sea-level is '

$$p = p_0 \, c^{-\frac{x}{H}}.$$

Hence shew how a barometer may be used to ascertain the difference of level between two stations.

SECOND HALF.

1. Solve

    (a) $\dfrac{dy}{dx} = \dfrac{x + 2y - 3}{2x + y - 3}$.   (b) $\dfrac{d^2y}{dx^2} + y = 2 \cos x$.

2. Solve

    (a) $\dfrac{dy}{dx} + \dfrac{y}{x} = y^3 . x^2$.   (b) $\dfrac{d^2y}{dx^2} + y = x - e^{2x}$.

3. Find the general integral and singular solution of

    (a) $y = px + \dfrac{a}{p}$, when $p = \dfrac{dy}{dx}$.

    (b) $y = px - \sin p$

4. Integrate

    (a) $\displaystyle\int \log x \, dx$,   (b) $\displaystyle\int \dfrac{dx}{\sin x + \cos x}$,

    (c) $\displaystyle\int_0^\tau 2 \cos^2 \left(\dfrac{2\pi t}{\tau} - a \right) dt$

5. (a) $x = a(\theta + \sin \theta),\ y = a(1 - \cos \theta)$

    are the equations of cycloid. Find the length of the arc between the points given by $\theta = 0$, $\theta = \pi$.

    (b) A circle, centre $(4, 0)$, radius 4, revolves about the axis of x. Find the volume generated between the limits $x = 2$, $x = 0$.

MATHEMATICS.

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

All the questions are of equal value.

Not more than THREE *questions from each half to be attempted.*

FIRST HALF.

1. Find the conditions of equilibrium of a rigid body under the action of a system of co-planar forces. If a system of forces acts in one plane upon a rigid body, and if the algebraic sum of their moments about each of three non-collinear points in the plane vanishes separately, the system of forces is in equilibrium.

2. A uniform rod rests in a fixed smooth hemispherical bowl; show that the rod cannot project beyond the rim of the bowl unless its length exceeds $\sqrt{\frac{2}{3}}$ times the length of the diameter of the bowl.

3. A smooth horizontal tube OA of length a is movable about a vertical axis OB through the extremity O.

A particle placed at the extremity A is suddenly projected with velocity aw while at the same time the tube is made to revolve about OB with angular velocity w. Show that the particle will have travelled half-way down the tube after a time $\dfrac{1}{w}\log 2$, and will not reach O in any finite time.

4. A heavy particle of mass m falls from rest in a medium in which the resistance is mk (velocity) ; show that the velocity acquired and the space fallen in time t are given by the equations

$$v=\frac{g}{k}\left(1-e^{-kt}\right) \text{ and } x=\frac{gt}{k}-\frac{g}{k^2}\left(1-e^{-kt}\right).$$

5. A thin uniform rod has one end attached to a smooth hinge and is allowed to fall from a horizontal position ; show that the horizontal strain on the hinge is greatest when the rod is inclined at an angle of 45° to the vertical, and that the vertical strain is then $\frac{1}{9}$ times the weight of the rod.

Second Half.

1. Enunciate and explain D'Alembert's Principle.

A plank of mass M is initially at rest along a line of greatest slope of a smooth plane inclined at an angle a with the horizon, and a man of mass M', starting from the upper end, walks down the plank so that it does not move : show that he gets to the other end in time.

$$\sqrt{\frac{2\,M'a}{(M+M')\,g\sin\,a}}\,,$$

where a is the length of the plank.

2. A particle starting from rest, moves in a straight line from a distance a towards a centre of force. The force varies inversely as the cube of the distance. Prove that the whole time taken by the particle in reaching the centre of force is $\dfrac{a^2}{\sqrt{\mu}}$.

3. A heavy uniform string 90 inches long hangs over two smooth pegs at different heights. The parts which hang vertically are of lengths 30 and 33 inches. Prove that the vertex of the catenary divides the whole string in the ratio of 4 : 5, and find the horizontal distance between the pegs.

4. (a) Prove that the thrust on any plane area exposed to a homogeneous liquid under gravity is equal to the weight of a column of the liquid whose base is equal to the area, and whose height is equal to the depth of the centre of mass of the area below the effective surface of the liquid.

(b) Find the centre of pressure of a circle, wholly immersed with its plane vertical in a homogeneous liquid.

5. An equilateral triangle ABC, of weight W and specific gravity σ, is movable about a hinge at A, and is in equilibrium when the angle C is immersed in water and the side AB horizontal. It is then turned about A in its own plane until the whole of the side BC is in the water and horizontal ; prove that the action at the hinge in this position

$$=\frac{2\,(1-\sqrt{\sigma})}{\sqrt{\sigma}}W.$$

GEOLOGY AND MINERALOGY.

Examiners— { E. H. ROBERTON, ESQ.
{ G. DE P. COTTER, ESQ.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Either (a) or (b) of each question only to be answered.

Each question carries equal marks.

1. (a) What do you mean by the term " Millerian Index " ?
Sketch the crystal of the cubic system whose faces are defined by the forms {0,0,1}, {1,1 0}, with the former predominating.

(b) What are meant by the terms :—twinning, oscillation, hemihedral, pseudomorph, double refraction, trigonal, pinacoid ?

2. (a) How would you ascertain whether samples submitted to you contained the following minerals :—Iron, Sulphur, Mercury, Manganese, Zinc, Gold ?

(b) How would you distinguish between the following minerals :--

(i) Graphite and molybdenite.

(ii) Iron pyrites, copper pyrites, marcasite, and gold.

3. (a) Draw an imaginary geological plan and section which include the following :—Unconformity, Trough fault, Dyke, Syncline, Anticline.

(b) In selecting a site for an important building on the side of a mountain, how would you decide whether the place is free from earthquakes and landslips ?

SECOND HALF.

Answer either part (a) or part (b) of each question.

The questions carry equal marks.

1. (a) Explain the terms anticline, unconformity, thrust-plain, reversed fault, epicentre, breccia, schistose structure, volcanic bomb, meandering (of rivers), peneplain.

(b) Give a classification of the volcanic rocks with their chief mineral constituents, and mention the chief lava-flows of India.

2. (a) What are wolfram and mica used for ? In what parts of the Indian Empire are these minerals found, and in what kind of rocks ?

(b) Write an account of the manganese ores of India and their associated rocks.

3. (a) Suppose you were to journey from the plains of India near the foot of the hills through the Himalayan mountains to Tibet, what kinds of rocks would you see as you travelled northwards ?

(b) In what countries are Gondwana deposits found ? What was the ancient extent of Gondwanaland ? What kind of climate existed at the commencement of the Gondwana period ? Name in order the rock series of the Gondwana System.

METALLURGY AND TESTING OF MATERIALS.

Examiners— $\begin{cases} \text{R. N. Sen, Esq., M.A.} \\ \text{H. F. Davy, Esq.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

Not more than THREE *questions to be attempted in each half.*

All questions carry equal marks.

First Half.

1. Describe the electrolytic refining of copper.
What is the effect of small quantities of foreign substances on copper ?

2 Describe in detail the Thompson method of determining the calorific power of a sample of coal. Discuss the value of the process and its limitations.

3. How can you determine the percentage of CO_2, O and CO in flue gases, and what is the practical use of such an analysis ? Give a sketch of the apparatus you use.

4. Give an account of the various refractory materials used for metallurgical purposes, stating the suitability of each for any particular object.
How would you test clay to be used for crucibles and fire-bricks ?

5. Briefly describe the cyanide process of extracting gold, and compare it with the chlorination process.

Second Half.

1. Name the copper alloys in common use, giving their compositions.
What foreign substances are usually found in structural steel, and in what quantities ? Name them, and say what influence each has on the physical properties of the steel.

2. Sketch and explain stress-strain diagrams for (*a*) a high tensile steel rod 10″ long × 1 sq. inch section and (*b*) a copper rod of the same size. What do you understand by (*a*) the elastic limit, (*b*) the modulus of elasticity, (*c*) the percentage elongation ? Of what use are these in determining the quality of the material ?

3. Give a concise account of a process for making malleable castings. From what material are they made, and what are their advantages and disadvantages ?

4. Describe the following heat treatments of steel : (*a*) annealing forgings, (*b*) case hardening, (*c*) hardening and tempering tool steel, giving details of the effect of the treatment on the physical properties of the material and the changes of internal structure which are brought about.

5. Describe briefly the Open Hearth Process of manufacturing steel. Two kinds of steel are manufactured, viz. acid and basic. What governs the selection of the particular process ?

FIG 2.

HALF PLAN

4'0"

FIG·1.

OFFSETT.

2'9"

2'6"

4'0"

PLAN.
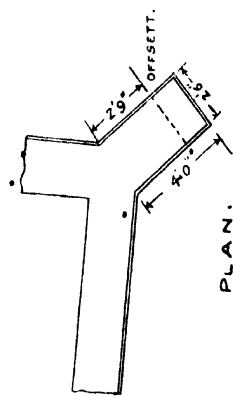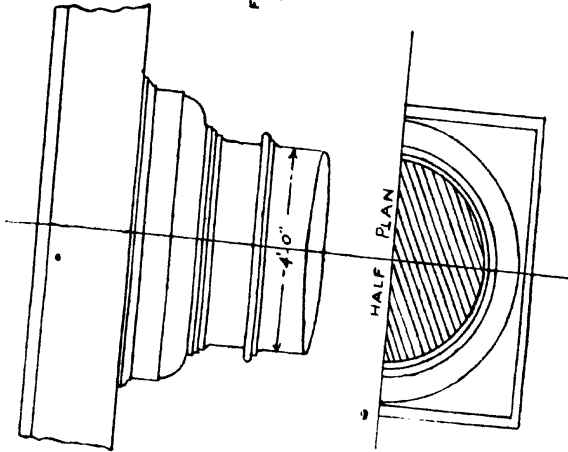
APPLIED PHYSICS.

Examiners—$\begin{cases} \text{S. N. MAITRA, ESQ., M.A.} \\ \text{F. W. SEDGEWICK, ESQ.} \end{cases}$

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

Only THREE *questions to be attempted.*

The questions are of equal value.

1. Derive an expression for the periodic time of a vibrating spiral spring from the doctrine of energy. Explain how the torsional rigidity of a wire may be determined from observations of the period of oscillations of a spiral made from the wire.

2. Prove the First Latent Heat Equation.

The latent heat of fusion of ice is 80 and the volume of 1 grm. of ice at 0°C is 1·0908 c.c. Prove that the effect of an additional atmosphere pressure will be to lower the melting point of ice by ·0074°C.

[Take the pressure of an atmosphere = 1·014 × 10⁶ dynes per sq. cm.].

3. What is meant by the coefficient of performance of a refrigerating machine ?

Obtain from thermodynamic principles the coefficient of performance of an ideally perfect refrigerating machine.

4. Give a critical account of methods which have been devised for the measurement of very high temperatures.

5. Draw the polar curve of distribution from the following data and hence find the mean hemispherical candle-power of a given carbon glow lamp.

$Oa_1 = 1\cdot6$ cms.	$Oa_5 = 2\cdot8$ cms.	Scale 1 cm. = 50 C.P.
$Oa_2 = 1\cdot9$ cms.	$Oa_6 = 3\cdot0$ cms.	O is the source, and Oa^1,
$Oa_3 = 2\cdot2$ cms.	$Oa_7 = 3\cdot2$ cms.	Oa_2, etc., are the radii
$Oa_4 = 2\cdot6$ cms.	$Oa_8 = 3\cdot4$ cms.	vectors drawn to the
	$Oa_9 = 3\cdot5$ cms.	polar curve.

SECOND HALF.

*Candidates are required to give their answers in their own words
as far as practicable.*

All questions have equal values in marks.

Only FIVE *are to be attempted.*

1. (a) Discuss the features of a supply of Water-power and of its neighbourhood that would render it advantageous to convert the supply into electrical energy for distribution.

(b) Give with your reasons any regions in India where you consider Water-power supplies with these features are likely to be found.

2. Discuss briefly the following points :—

(a) The advantages of driving machines in factories and workshops by electric motors.

(b) The relative advantages of ordinary fires and electric radiators for warming rooms

(c) The reason why electrification is more suitable to " suburban " than " main line " railway traffic.

3. Sketch the construction of an Armature for a small continuous current motor, explaining the principal points of the construction.

4. A house is lighted by 18×50 Watt metal filament incandescent electric lamps. The cost of the Wiring Installation is Rs. 900, and interest and depreciation combined can be taken as $9\frac{1}{2}\%$. The price of the lamps is Rs. 1/12/- each, their life is 1500 hours, and they consume 1·6 watts per mean spherical candle power. The price of electrical energy is 6 annas per Unit.

Calculate the cost of 1000 candlehours of light in this house.

5. Explain the following points in connection with the phenomena of an electric arc between carbons for illumination purposes :—

(a) The method by which the arc is started and afterwards the manner in which the current continues to flow across the gap between the carbons.

(b) The effect of partially enclosing the arc.

(c) The difference between a flame arc and an ordinary carbon arc.

6. Describe with sketches the characteristic component parts for the following systems of wiring buildings internally for an electric supply :—

(a) The Wood Casing System,

(b) The Flexible Metallic Covered System ; and contrast their advantages.

7. (a) Explain the meaning of :—(1) the Insulation Resistance of an insulated wire, and (2) the Insulation Resistance to Earth of a circuit.

(b) Explain in connection with the above why (1) can be readily calculated while (2) cannot be calculated for an ordinary electric supply circuit and is also very variable.

(c) A and B are the terminals of an instrument for measuring insulation resistance ; show by a diagram how you would connect two Mains X and Y to the terminals A and B so as to measure (1) the insulation resistance between X and Y and (2) the insulation resistance of X and Y together to earth.

8. A Continuous Current supply of 25 amperes at 5 volts is required at certain terminals X and Y, a 220 volt C.C. supply being available : explain with diagrams two methods of obtaining the required supply and contrast their advantages.

ROADS AND RAILWAYS.

Examiners— $\left\{ \begin{array}{l} \text{T. H. Richardson, Esq.} \\ \text{G. F. Wyatt, Esq.} \end{array} \right.$

Candidates are required to give their answers in their own words as far as practicable.

Only FOUR *questions to be answered from each half.*

The questions are of equal value.

First Half.

1. Give sketches to show how you would construct a reinforced brick roof about 18′ span. (No calculations required).

2. Show by sketches how you would drain a hill road graded for pack animals and foot passengers only.

3. Sketch a pipe culvert for a first-class road where the drainage comes from a small area that drains into a tidal river, the level of the area to be drained being lower than the water level in the river at high tides.

4. What surface would you choose for roads such as—

(a) The Strand Road.
(b) Dalhousie Square.
(c) A first-class road in Chota Nagpur.
(d) A first-class road in Dacca.
(e) A third-class district road.

Give your reasons in each case.

5. Increasing axle load on a railway involves laying rails of a heavier section.

This can be avoided to some extent by spacing the sleepers closer. What consideration limits the increase that can be met by closer spacing in the case of the permanent-way adopted on Indian Railways ?

Second Half.

1. What points should be especially observed when locating a railway in hilly country ?

2. What are the advantages of an arched bridge over a girder bridge, and vice versa, for spans up to 40′ ?

3. Give a dimensioned sketch (not to scale) of a small station yard, 5′6″ gauge, consisting of main line, one loop and a short dead end. Outer points 1 in 12, dead end points 1 in 8½. Give the leads of the points and the distance of the fouling points from the nose of the crossing.

4. What is a transition curve ? Give the reasons for its use and describe briefly the method of setting out.

5. Describe the method of plate-laying, differentiating between banks and cuttings. How would you organise a plate-laying gang for laying a road with wooden sleepers ?

IRRIGATION AND SANITARY ENGINEERING.

Examiners— { CHUNILAL SARKAR, ESQ., B.E.
{ G. B. WILLIAMS, ESQ.

Candidates are required to give their answers in their own words as far as practicable.

Answer Question No. 2 and any THREE *out of the remaining four*

FIRST HALF.

All questions carry the same marks.

1. What are the chief characteristics of a Delta river ? What main operations are connected with delta project, and why is drainage a necessary accompaniment to irrigation ?

2. Distinguish between a ' weir ' and a ' barrage.'
Mention the cause of failure of the Delta barrage of the Nile. How was the restoration of the barrage carried out ? Give sketches illustrating your answer.

3. What are the chief dangers to river weirs, and how are they severally provided against in designing these works ?

4. Describe, with the aid of sketches, the Narora weir, stating the object of the weir and explaining the reasons which rendered necessary the alterations of recent years.

5. In a given tract of country, would you give a steeper bed slope to a canal of larger capacity than to a small one or the reverse ? Give your reasons.
A canal with a bed slope of one foot per mile runs through a country with an average slope of 3 feet per mile. How is the difference in slope dealt with ?

SECOND HALF.

FOUR *questions only to be answered.*

The questions are of equal value.

1. What are the objects to be aimed at in designing a system of (*a*) surface drains and (*b*) sewers ?
Draw a dimensioned sketch of a sewer capable of discharging, when flowing full, 40 cubit feet per second with a velocity of 3 feet per second.
What is meant by the following terms :—(i) self-cleansing velocity, (ii) combined system of drainage, (iii) average daily dry weather flow in a sewer ?

2. What is the object of sewage purification ? Describe as far as you can the processes of (i) liquefaction in a septic tank, (ii) purification by passing through aerobic filters, (iii) purification of sewage by application to land.

3. Describe the system of disposal of nightsoil by trenching.
What are the chief dangers and nuisances arising from this form of disposal, and how are they to be guarded against ?

4. Explain, illustrating by sketches, the phenomenon of springs.

Suppose it is intended to give a supply of water to a town of 100,000 inhabitants, at the rate of 30 gallons per head per day. The supply is to be obtained from an impounding reservoir to hold 250 days' supply plus sufficient to allow for loss by evaporation. The fall from the reservoir to the service reservoir at the town is 50 feet, the distance being 10 miles. The evaporation from the surface of the reservoir is $\frac{1}{10}$th inch per day.

What is (a) the approximate capacity of the impounding reservoir, (b) the diameter of the pipe to the service reservoir calculated from the formula $v = 110 \sqrt{rs}$, where v = velocity in feet per second, r = hydraulic mean radius $= \dfrac{\text{dia. of pipe}}{4}$, s = inclination of pipe ?

5. Describe, illustrating by sketches, a slow sand filter, and explain its operation.

APPLIED MECHANICS.

$Examiners-\begin{cases} \text{T. H. Richardson, Esq.} \\ \text{D. H. Remfry, Esq.} \end{cases}$

Molesworth, Trautwine, Military Works Handbook and a Manufacturers' Handbook such as Dorman Long's may be used for this paper.

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Answer FOUR questions only from this half.   Each question carries 50 marks.

1. The girders on a Railway have been designed in accordance with the G. of I. bridge rules of 1908. It is proposed to introduce heavier locomotives. Show how you would determine if this new stock would cause greater stresses in the girders than those for which they were designed.

2. Why are the horizontal reactions of the walls carrying a roof truss indeterminate ?
How is this difficulty met ?

3. A tie 6″ × ½″ is spliced by two cover plates each 6″ × 1″ with six rivets on each side as shewn. The diameter of the rivets is 1″ and the pitch is 1″.
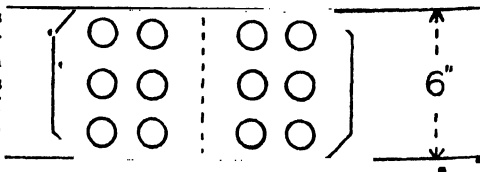
Do you approve of the joist ? If not, propose some improved method.

4.   Design a strutt with free ends 10′ long to carry a load of 12 tons.

5. Investigate the distribution of shearing stress on a I section 24″ × 7½″. Thickness of flanges 1″, thickness of web ·6″.

SECOND HALF.

Only FIVE *questions to be answered from this half. Each question carries* 40 *marks.*

6. Design a wind brace for a bridge, effective length 6′ 6″. Stress varies from +30 tons to −30 tons. Show what rivets you would use and how you would connect it to the flanges of a plate girder.

7. Diagram shows the wind-bracing system between the top booms of a 60′ plate girder deck railway bridge. The girders are 6′ deep. A train has an exposed area of 10′ per foot run wind pressure, 33 lb per square foot of loaded span, 56 lb per square foot of unloaded span. Give the stresses in the members of the bracing.
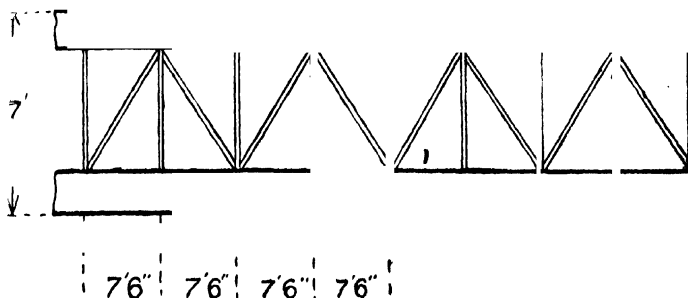
8. Design a reinforced concrete column 12′ high to support 35 tons.

9. Design the footings to distribute the load on a large steel column carrying 300 tons over a foundation bed with a max. pressure of 1 ton per sq. foot. It is desirable to limit the depth of the foundations to the minimum possible.

10. Design a dam 20′ high for a reservoir.

11. If the dam in the last question were placed across a stream which in flood would overflow the crest of the dam to a height of 5′, how would it affect the design ?

12. A floor is required for an office—span 16′, live load 40 lb per sq. foot. The floor may be of wood planks 3″ thick on wooden beams 4′ 'entres, or of concrete 4″ thick on rubbled steel joists 6′ centres.

Design the floor for one of the above cases.

HYDRAULICS.

Examiners— $\begin{cases} \text{T. H. Richardson, Esq.} \\ \text{G. I. Huntingford, Esq.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Molesworth. Trautwine, and Buckley may be used if brought by candidate.

Attempt only FOUR *questions in each half.*

FIRST HALF.

1. Design a channel to discharge 10 cusecs where $n = ·025$, and the 50
conditions being such as to give you a free choice of suitable slope.

2. (a) What are your ideas about Kutler's formula ?   50
(b) On a certain small channel the result of a long series of
experiments tends to show that the discharge you have estimated by
means of Kulter's formula is too high. What would you conclude ?

3. The alignment of a road crosses a loop of a river in the Bengal 50
plains in two places as shewn in sketch involving two bridges. A
member of the District Board, who is an authority on engineering,
proposes to divert the river as shewn in dotted lines on the grounds
that as the banks are low and the soil soft, the work will cost less
than the cost of the two bridges. Write a short note approving or
disapproving of the suggestion.
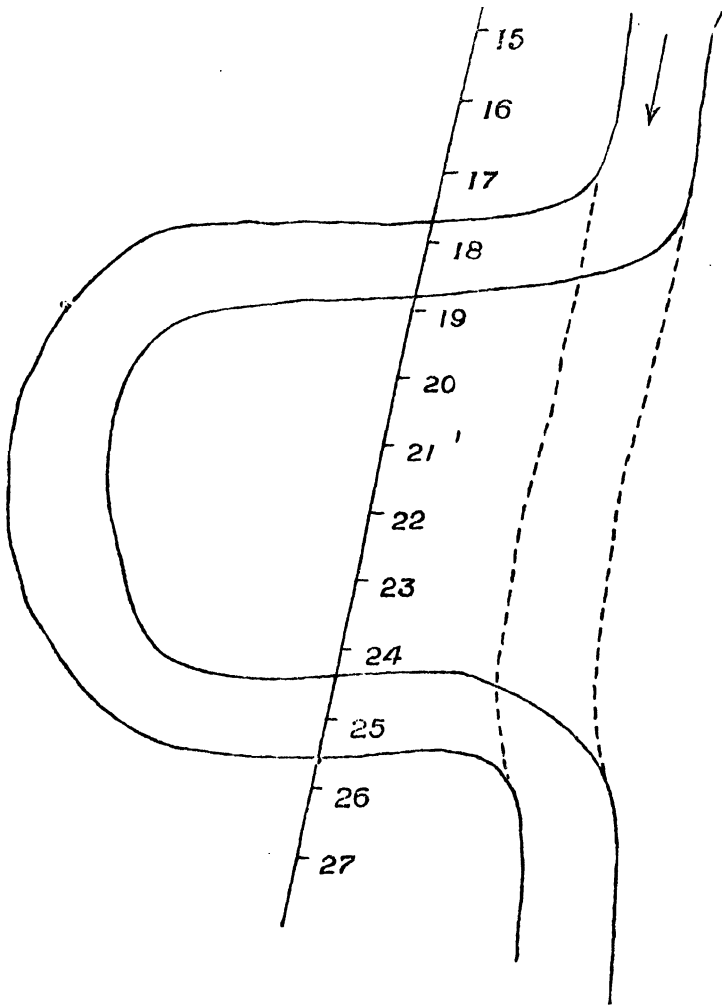
The numbers refer to your " thousands " pegs.

4. A 24″ pipe culvert 40′ long, laid on a gradient of 1/100, is run- 50
ning with a depth of water of 23″. Find its discharge.

5. The channel below the culvert in the last question is blocked 50
by a boulder falling into it; this causes the water to rise 2″ at the
outlet.
How much will it rise at the entrance ?

60

SECOND HALF.

1. A 6″ pipe, 300 ft. long, is laid at a slope of 30° and discharges   50)
water freely into a reservoir, at the rate of 60 gallons per minute.
   The inlet end of tho pipe is plain cylindrical.
   What is the total head due to the height and friction', and what
will be the nett horse-power of the engine to work the pump ?
   The pipe is a new one.

2. The Tunnel of a culvert of 10 ft. diameter is made in two halves,   50
an upper and a lower, each of one piece of concrete, the upper simply
resting on the lower, not being cemented to it. The tunnel passes
horizontally under a canal to carry flood water through. If the
water level is 20 ft. above the bottom of the tunnel, what is the force
tending to lift the top half ?
   How thick must the arch be to prevent being lifted if the concrete
weighs 120 lb per cubic foot ?

3. A vertical sluice shutter hinged at its bottom edge is 10 ft. high   50
and 4 ft. wide. The water level on the upstream side is flush with the
top of the shutter and there is no water on the downstream side. The
shutter is held up by a horizontal chain attached to the centre of the
top edge. What is the tension on this chain ?

4. What is a Venturi Meter ? Give a description, illustrated by
sketches, showing the principle on which it works.
   Show by an actual numerical example what information is ob-
tained from it, and how this is obtained.
   How reliable would you expect the information to be, and on what
does the accuracy on the device depend ?

5. A pipe of 3″ diameter delivers water freely into an open cylin-   50
drical cistern, 20 ft. high and 10 ft. diameter, from a main in which
the pressure is 63½ lb. per square inch.
   There is a 4″ circular hole in the centre of the bottom of the cistern.
   At what height above the bottom of the cistern will the water level
remain?
   Neglect friction and all coefficients of contraction, discharge, etc.

ENGINES AND MACHINERY.

Examiners— $\begin{cases} \text{C. A. KING, ESQ.} \\ \text{J. LEESH, ESQ.} \end{cases}$

Only THREE *questions to be attempted.*

All questions of equal value.

' FIRST HALF.

1. In a boiler trial, a continuous collection is made of samples of
the furnace gases as they leave the boiler, and a *Volumetric* analysis
of the samples collected gives

$$CO_2 = 10.35\% ; \quad O = 8.1\% ; \quad N = 81.55\%.$$

The composition of the coal used during the trial was

$$87.3\% C., \quad 3.7\% H., \quad 1.4\% O., \quad 2.3\% N.,$$

and the remainder ash. Find the lbs. of air admitted to the furnace per lb. of coal burnt. Also, if the air temperature $=61°F.$, and the escaping gases are at $753°F.$, find the loss in B. T. U. in the waste gases per lb. of coal burnt.

Specific heat of
$$CO_2 = ·217, \text{ of } O = ·218, \text{ of } N = ·244.$$

2. You are required to determine the average calorific value of a consignment of coal.

Explain clearly :—

(a) The method of selecting and preparing a representative sample.

(b) The method of setting up the apparatus and of determining its water equivalent.

(c) The method of correcting for radiation.

(d) The method of calculating the required calorific value.

3. What are the principal methods used for accelerating the rate of combustion of fuel in a boiler ? Give the advantages and disadvantages of each.

What are the advantages of forced draught, and why does forced draught give a higher temperature in the furnace ?

Describe briefly, with the aid of sketches, Howden's System of Forced Draught.

4. Sketch an arrangement of steam-pipes suitable for a Power Station of moderate capacity. Explain clearly how the pipes are supported and what arrangements are made for expansion and drainage. If you recommend any particular "System" enumerate carefully the advantages and the disadvantages of that system.

5. Illustrate, by means of line sketches, two kinds of reversing gears for steam engines. Indicate clearly the direction of rotation, and also how reversal of the engine is obtained.

SECOND HALF.

Only THREE *questions to be attempted.*

1. Give the theory of the Steam Injector and explain its working. Dry steam at a temperature of $333°F.$ is supplied to an injector ; if the supply temperature of the water is $65°F.$ and the delivery temperature is $165°F.$, find approximately the weight of water drawn into the injector per lb. of steam.

2. A steam-engine may be governed by controlling the cut-off or by controlling the initial pressure of the steam by means of a throttle valve.

Compare the two methods, showing clearly the effect on the indicator diagram in both cases, and explain how the governor acts. Sketch the two arrangements diagrammatically.

3. Sketch some form of "Steam Trap" and explain its action. Point out the advantages of the particular trap you describe as compared with any other steam trap. Where are such steam traps fitted, and why ?

4. What is meant by the expression "Equivalent Torque" as applied to the case of a shaft subjected to combined twisting and bending ? Deduce the formula for finding it.

A shaft transmits 50 H.P. at 135 revolutions. There is a bending moment on the shaft equal to ¾ths of the twisting moment. Find the diameter of the shaft when the maximum stress is 10,000 lb. per sq. inch.

5. An engine has the following dimensions: stroke 18″; connecting rod 36″; travel of valve 4″; outside lap of valve 2″; inside lap of valve ¼″. The angle of advance of the eccentric is sin⁻¹⅝. Find the point of cut-off and draw the hypothetical indicator diagram. Initial pressure 100 lb., back pressure 20 lb. per square inch.

DRAWING.

$$Examiners - \left\{ \begin{array}{l} \text{D. R. G. TURNBULL, Esq.} \\ \text{W. J. KEIR, Esq.} \end{array} \right.$$

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

Candidates must answer the FIRST and any ONE of the other questions.

1. The concrete in foundation of an outer long wall of a two-storied building is 5′ 6″, and that of the inner walls is 6′ 6″ wide, both being at a depth of 4′ 6″ below ground level on good soil. The distance between their centres is 15′ 8″. Draw to a scale of ¼ inch to a foot the section of the walls required and the rooms formed by them, taking the weight supported at a ton on the square foot, and the spacing of the roof and floor joists 5′ 6″ apart from centres. The sections of the joists and tees used should be stated on them, also their weight per foot.   60

2. Draw to a scale of 1½″ to a foot an easily put together and removed Form for the construction of a reinforced column 12″ square. A portion of the elevation and the plan are to be shown.   40

3. Sketch any three of the following:—   40

(a) A vertical section through three or four treads of a wooden staircase.

(b) The junction of a parapet with the roof and cornice, also the down water-pipe, and portion of the wall supporting them, in a single section.

(c) A section through an architrave consisting of joists cased in wood, and another cased in plaster. The ends of the architraves rest on 2′ 1″ walls.

(d) A vertical section through a splayed and revealed window with a sill moulding. The window is a glazed one.

SECOND HALF.

1. Draw in plan and elevation to ½″ scale, the corner of a stone building with a Gothic angle buttress (see plan Diagram No. 1). Height of buttress 12′, plinth 1′ 6″. There is an offset at ⅓ of its height from ground; the coping of offset and top of buttress to be set at an angle of 50° with horizontal. Shew the jointing.   20

2. Diagram No. 2 is the plan and elevation of a Doric capital; 20
draw same to double the scale in isometric projection, shewing cor-
rectly the soffit of entablature.

3. Draw to the same enlarged scale as in question No. 2, the plan 30
and section of the Base of a Doric column.

4. A chimney stack of 6' 0" × 4' 0" sides, rising to ridge level, 30
penetrates one side of a roof of 52° pitch and 40' span. The long side
of stack is parallel to the ridge and is built flush with the external
wall of building.

Draw the front elevation of chimney shewing its shadow on the
roof cast at the conventional angle of 45° to ¼" scale, with plan and
diagrammatical section through roof. Top of stack to be finished
with a simply moulded coping.

(Non-professional Section).

MATHEMATICS.

Examiners— $\begin{cases} \text{P. Ganguly, Esq., M.A.} \\ \text{S. N. Maitra, Esq., M.A.} \\ \text{Babu Tulsicharan Bose, M.A.} \end{cases}$

First Paper.

Candidates are required to give their answers in their own words as far as practicable.

All the questions are of equal value.

Not more than THREE *questions to be attempted from each half of the paper.*

First Half.

1. When the co-ordinates x, y of a moving point are given functions of the time t, how can we calculate its velocity and acceleration ?

If $\qquad x=a$ (cos $\theta + \theta$. sin θ), $y=a$ (sin $\theta - \theta$. cos θ)

and θ increases at a uniform rate w, prove that the velocity of the point is $a\theta w$.

2. Prove that the moment of inertia of a lamina about any axis in its own plane is equal of the moment of inertia about a parallel axis through its centre of mass plus the product of the mass of the lamina into the square of the distance between the two axes.

3. Prove the equations

$$s=c \tan \psi \text{ and } y=c \sec \phi$$

for the common catenary.

4. Find the centre of pressure of a triangle wholly immersed in a homogeneous liquid.

5. Define *metacentre*, *surface of buoyancy*, *surface of floatation.*

Prove that the positions of equilibrium of a floating solid are obtained by drawing normals from the centre of gravity of the solid to the surface of buoyancy.

Second Half.

1. Solve

(a) $\dfrac{dy}{dx} = \dfrac{2x+y-2}{3x+y-3}$. (b) $(D-1)(D-2)y=4 \cos 2x$.

2. Solve

$$(a)\ \frac{dy}{dx} + \frac{y}{x} = \frac{y^n}{x^n}. \qquad (b)\ (D-1)^2 y = e^x.$$

3. Find the general integral and singular solution of

$$(a)\ y = px + 2\sqrt{p},\ \text{when}\ p = \frac{dy}{dx}.$$

$$(b)\ y = px + a\sqrt{1 + p^2}.$$

4. Integrate

$$(a)\ \int \frac{\sqrt{a^2 - x^2}}{x^4} dx. \qquad (b)\ \int_0^a \sqrt{a^2 - x^2}\ dx.$$

$$(c)\ \int x^3 \sin ax\ dx.$$

5. (a) A hollow cone, whose semi-vertical angle is 30°, is held with its axis vertical and vertex downwards, and water is poured into it at the steady rate of 3 cubic feet per minute. Find the rate at which the depth (measured along the axis) of water is increasing when that depth is 3 feet.

(b) If s be the length of an arc of the catenary

$$y = c \cosh \frac{x}{c}$$

measured from the lowest point, prove that the area bounded by this arc, by the vertical ordinates at its ends, and by the horizontal line at a depth c below the lowest point, is equal to cs.

MATHEMATICS.

SECOND PAPER.

FIRST HALF.

1. Prove that in general a system of forces in one plane can be reduced to two parallel forces acting at two given points in the plane. State the exception to the rule. If a uniform beam of weight 10 lbs. and 3 feet long rests on two rough parallel bars (coeff. of friction ·3) in a horizontal plane at a distance 2 ft. apart and at right angles to them, determine the position of the beam in order that the couple in a horizontal plane which can be applied to it without disturbing it may be the greatest possible.

Determine also the magnitude of this couple.

2.   State the laws of limiting fraction.

A ladder is placed with one end on a rough horizontal floor and the other against a rough vertical wall, the vertical plane containing the ladder being perpendicular to the wall.   Find the positions of equilibrium of the ladder.

3.   A straight smooth tube revolves with angular velocity w in a horizontal plane about one extremity which is fixed.   If initially when $t=0$, a particle inside it be at a distance a from the fixed end and moving with velocity V along the tube, show that its distance at time t is

$$a \cosh wt + \frac{V}{w} \sinh wt.$$

4.   A rod movable about one end falls in a vertical plane, starting from a horizontal position.   Prove that the pressure on the end is increased to 2·5 times the weight of the rod when it reaches the vertical position.

5.   Find the time of oscillation of a compound pendulum consisting of a rod of mass m and length a, carrying at one end a sphere of mass M and diameter $2b$, the other end of the rod being fixed.

SECOND HALF.

1.   State and explain D'Alembert's Principle.

A rod revolving on a smooth horizontal plane about one end, which is fixed, suddenly snaps in two ; describe accurately the subsequent motion of each portion.

2.   Find the centre of gravity of the perimeter of a triangle.   Find the centre of gravity of a trapezium whose parallel sides are 6 inches and 14 inches long and the other sides are each 8 inches long.

3.   A heavy elastic string, whose natural length is $2\pi a$, is placed round a smooth cone whose axis is vertical and whose semi-vertical angle is a.   If W be the weight and λ the modulus of the string, prove that it will be in equilibrium when in the form of a circle whose radius is

$$a \left(1 + \frac{W}{2\pi\lambda} \cot a \right).$$

4.   A man drags behind him a rope 20 ft. long, the hand being 2·5 ft. above the ground ; if he is walking at the rate of 4 miles per hour, find the rate at which he is doing work. $\mu = ·1$, weight of rope $= 5$ lbs. per foot-run.

5.   A solid hemisphere is placed with its base inclined to the surface of a liquid, in which it is just totally immersed, at a given angle a ; shew that the resultant thrust on the curved portion of the surface will be equal to twice the weight of the liquid displaced if $\tan a = 2$.

THIRD PAPER.

APPLIED PHYSICS.

Examiners— $\begin{cases} \text{D. B. MEEK, ESQ., M.A.} \\ \text{S. N. MAITRA, ESQ., M.A.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

SIX *questions only to be attempted, three of which must be taken from the first half, and three from the second half.*

All questions are of equal value.

FIRST HALF.

1. Describe in outline any method of mechanical refrigeration, drawing a sketch diagram to indicate a possible cycle of operations.
2. What is meant by the coefficient of performance of a refrigerating machine?

Obtain from thermodynamic principles the coefficient of performance of an ideally perfect refrigerating engine.

3. Describe the construction and mode of action of a (1) radiation pyrometer and (2) a resistance pyrometer.

Give briefly the theory underlying (2), and explain how the constant of the reduction formula is found.

4. Define the terms:—Mean illumination of a surface, intrinsic brightness of a source, mean spherical candle-power, and the polar curve of distribution of light. Explain, with diagrams, any graphical method of finding the mean hemispherical candle-power of a source.

SECOND HALF.

1. Describe the Lummer-Brodhun photometer.

A standard 32 c.p. lamp is used to test an incandescent lamp which takes a current of ·35 amp. with a difference of potential of 85 volts between its terminals. If their respective distances from the photometer screen be 177·5 cms. and 92·5 cms., find out the number of Watts per candle-power absorbed by the lamp under test.

2. How could you calculate Poisson's ratio by means of the distortion which is produced in the cross-section of a uniform rectangular bar when the latter is bent?

Give a concise account of some practical method of finding this ratio by the bending of a beam of rectangular section.

3. Explain Searle's dynamical method of finding Young's modulus or the torsional rigidity of a wire.

4. Prove the Second Latent Heat equation.

Assuming the empirical equation

$$L = 605·5 - ·695T,$$

where L is the latent heat of steam at temp. T, and applying this to saturated steam, shew that the specific heat of saturated steam is negative at all moderate temperatures.

What is the physical meaning of this result?

FOURTH PAPER.

GEOLOGY AND MINERALOGY.

Examiners—$\left\{\begin{array}{l}\text{G. DE P. COTTER, ESQ.}\\ \text{E. H. ROBERTON, ESQ.}\end{array}\right.$

Candidates are required to give their answers in their own words as far as practicable.

FIRST HALF.

Either (a) or (b) of each question only to be answered.

Each question carries equal marks.

1. (a) Describe the characteristics of various types of volcanic vents on the earth's surface.

(b) What is a glacier? Trace the action of a glacier from its source to its melting point.

2. (a) Discuss the origin and conservation of petroleum accumulations in the earth's strata. Apply your answer to the deposits of the Indian Empire.

(b) Of what use are the following minerals, and where are they found in India:—Alum, Salt, Gypsum, Asbestos, Sandstone, Steatite, Quartz sand?

3. (a) Give some account of the Vindhyan system of rocks.

(b) What do you mean by the term Gondwanaland? Give an account of the lower Gondwanas.

SECOND HALF.

Answer either part (a) or part (b) of each question.

The questions carry equal marks.

1. (a) If you were to find a fault exposed in the side of a cliff or in a mine or quarry, what signs would you search for in order to determine which was the downthrow side?

(b) When outcrops of gently dipping strata are accurately mapped in the field, it is found that in hilly country the outcrops are much more sinuous than in country which is fairly level. In hilly country the gently dipping outcrops either bend up or down the valleys. Why is this?

2. (a) What is the refractive index of a mineral, and what is the birefringence of a mineral? In which of the crystalline systems is birefringence found?

(b) Explain the method of representing the faces of a crystal by spherical projection. What are the advantages of this method? Draw the spherical projection of any crystal you like to choose.

3. (a) What are the chief blowpipe reactions for arsenic, antimony, boron, chromium, calcium, aluminium, metallic sulphides, manganese, cobalt, iron?

(b) Give the chemical composition, hardness, crystalline system, and colour of calcite, apatite, hematite, sphalerite, mispickel, cinnabar, witherite, corundum, gypsum, rocksalt.

·FIFTH PAPER.

TECHNICAL CHEMISTRY (METALLURGY).

Examiners—$\left\{\begin{array}{l}\text{R. N. SEN, ESQ., M.A.}\\ \text{N. BRODIE, ESQ.}\end{array}\right.$

Candidates are required to give their answers in their own words as far as practicable.

Not more than THREE *questions to be attempted in each half.*

All questions carry equal marks.

FIRST HALF.

1. Write what you know about the influence upon the strength, hardness and the melting point. of small quantities of foreign substances present in ordinary tool-steel and foundry iron.

2. What is Pig iron ? Give an account of the manufacture of Pig iron from the ores.

3. What is a regenerative furnace, and what are its advantages ? Briefly describe with a diagrammatic sketch any furnace of this type.

4. What is meant by the calorific power of a fuel, and how is it determined ?

Calculate according to the practical rule the calorific power of a fuel containing 10 per cent. ash, 84 per cent. carbon, 3 per cent. hydrogen, 2 per cent. oxygen, and 1 per cent. nitrogen ; assuming that 1 gram of hydrogen produces 34,180 cals. and 1 gram of carbon produces 8080 cals. when completely burnt.

5. Enumerate and explain the various methods of measuring high temperatures. Describe any form of pyrometer you know.

SECOND HALF.

1. Give an account of the destructive distillation of wood and of the products obtained thereby.

2. State what you know of the uses of the more important industrial alloys containing tin.

3. Give an account of the Bessemer process, explaining carefully the different sorts of pig iron required for acid and basic furnace linings.

4. Write a specimen analysis of blast-furnace slag. How would you propose to use such a slag for the manufacture of Portland cement ?

5. Give examples of the application of electrolysis to metallurgical operations.

Preliminary Scientific Examination.

November, 1918.

CHEMISTRY.

Examiners—
{
RAI CHUNILAL BASU, BAHADUR, M.B., I.S.O., F.C.S.
ASST -SURGEON BENIMADHAB CHAKRABARTI, B.A., L.M.S.
}

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

THREE *questions only to be answered from each half ; the first question in each half is compulsory.*

FIRST HALF.

1. How is Sulphur Dioxide ordinarily prepared ? How would 80
you liquefy it ? What would happen if you pass it into—
   (a) solution of Potassium Permanganate;
   (b) Chlorine water ;
   (c) Nitric Acid ?
State its chief uses.

2. Write a short essay on the Valency of Elements. 60

3. Describe Leblanc's process of the manufacture of Carbonate of 60
Soda. State its properties and chief uses.

4. How would you prepare the oxides, chlorides and nitrates of 60
Mercury ? Give their formulæ and physical characters.

SECOND HALF.

1. How is Ozone ordinarily prepared ? 80
Describe its properties and tests.
How would you prove that three volumes of oxygen condense to
form two volumes of ozone ? Sketch the apparatus you would use
for this experiment.

2. Give the formulæ of the following substances :— 60
(a) White vitriol; (b) Nitre ; (c) Pyrolusite ; (d) Salammoniac.
What would happen if you heat them (1) alone, and (2) with
concentrated Sulphuric Acid ? Name the principal products formed
in each case.

3. What are " Salts," and how are they classified ? State briefly 60
the general modes of formation and characters of each class, illustra-
ting your answers by examples.

4. How would you prepare the following compounds? State 60 their properties and uses, and give one chemical test for each :—

(a) Chlorine peroxide;
(b) Hyposulphite of soda ;
(c) Ferric chloride ;
(d) Silver nitrate.

PHYSICS.

Examiners—$\begin{cases} \text{Tulsidas Kar, Esq., M.A.} \\ \text{Nibaranchandra Ray, Esq., M.A.} \end{cases}$

Candidates are required to give their answers in their own words as far as practicable.

Only THREE *questions to be attempted in each half.*

The questions carry equal marks.

First Half.

1. Describe Atwood's machine, and explain how it can be used to investigate the laws of falling bodies.

2. Deduce the conditions of equilibrium of a floating body.
Find the specific gravity of a wooden cylinder which floats with $\frac{1}{10}$ of its length above the surface of water.

3. Describe the human ear, and explain the functions of its different parts in the transmission of sound vibrations.

4. Explain a method of proving experimentally the relation between the pressure and the centigrade temperature of a quantity of air.
A given quantity of air occupies 1000 cc. at 100°c. and 800 mm. Find its volume at 30°c. and 760 mm

5. Define specific heat. Describe the method of mixture for finding the specific heat of a liquid. Deduce the formula.

Second Half.

6. Obtain the relation between the object distance, image distance, and the focal length in case of reflection from a concave mirror. Explain from the formula the changes in the nature of the image when the object is moved from a very great distance to the pole of the mirror.

7. Describe the construction of the compound microscope, and explain the functions of the different parts, drawing a neat schematic diagram showing the course of the typical rays through it.

8. Describe any influence machine for producing statical electricity, and explain its action.

9. Describe the tangent galvanometer and obtain a formula for it. Explain how its constant can be determined.

10. Give a neat sectional diagram of Ruhmkorff's coil, and explain its action and use.

BOTANY.

Examiners—{ DR. EKENDRANATH GHOSH, M.D., M.Sc.
SAHAYRAM BOSE, ESQ., M.A.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Diagrams should be neatly drawn with black lead pencil.

FIRST HALF.

Only TWO *questions to be answered.*

1. How do monocots differ from dicots ?   50
2. What is Carbon-assimilation ? How is it carried on ? How do 50
green plants obtain their nitrogen ?
3. Contrast the sexual reproduction of Spirogyra and Vancheria.   50

SECOND HALF.

Only TWO *questions to be answered.*

1. Describe briefly the Nat. Ord. Apocynaceæ.   Give some   50
examples of common plates.
2. Enumerate and briefly describe the various forms of Indefinite   50
Inflorescence.
Describe the changes in the stele which take place in Dicot. root in   50
secondary growth.

ZOOLOGY.

Examiners— { DR. EKENDRANATH GHOSH, M.D., M.Sc.
DR. K. S. RAY.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

FIRST HALF.

TWO *questions only to be attempted.*

1. Describe in detail the life-history of *Monocystis*, giving explana-   50
tory illustrations.
2. Compare the excretory systems of the Earthworm, *Palaemon*   50
Unio, and the Cockroach.

3. What do you understand by the following terms ?— 50
Proctodaeum, cerci, cindocil, coelom, chromosome, organ of Bojanus, gonapophysis, gizzard, typhlosole, telson.

Second Half.

Only TWO questions are to be answered.

1. Describe and compare the central Nervous System of Bhekti 50
and Toad.

2. Describe the development of a vertebrate eye. Illustrate your 50
answer with diagrams.

3. Enumerate the membrane and cartilage bones formed in 50
connection with the first and second visceral arches, adding a short
note on each.

First M.B. Examination.

November, 1918.

ANATOMY.

Examiners— { Lt.-Col. R. P. Wilson, F.R.C.S., I.M.S.
{ Asst.-Surgeon Nanilal Pan, M.B. •

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

Only TWO *questions are to be attempted in each half.*

First Half.

1. Describe the superficial origin, course and distribution of the 150
Oculomotor nerve.
2. Describe the Internal Jugular Vein; mention its tributaries 150
and give its relations.
3. Give short descriptions of the following :—Ventricle of the 150
larynx ; Valvulæ Conniventes ; Fossa Ovalis (saphenous opening) ;
Ligamentum Arteriosum ; Corpora Mamillaria ; Axillary Sheath.

Second Half.

1. Describe the origin, course and distribution of the Obturator 150
nerve.
2. Describe Hunter's Canal (Adductor Canal). Enumerate its 150
contents and indicate their relative positions.
3. Give the origin, nerve supply and action of the following 150
muscles :—

(1) Gastrocnemius.
(2) Mylohyoideus. •
(3) 1st Dorsal interosseous of the hand.

PHYSIOLOGY.

Examiners-- { MAJOR D. McCay, M.B., I.M.S.
{ CAPT. J. A. SHORTEN, I.M.S.

*Candidates are required to give their answers in their own words
as far as practicable.*

Full marks—600.

Only TWO *questions are to be answered in each half.*

All the questions are of equal value.

FIRST HALF.

1. Trace the circulation of the blood in the foetus and describe the changes which take place at birth.
2. Give an account of the co-relation between the different digestive enzymes and describe the mechanism by which they work.
3. Classify nerve cells and describe the anatomical limitation of the upper and lower motor neurons.

SECOND HALF.

1. Give a concise description of the organ of Corti in the internal ear, and give a short account of the two best known theories of hearing.
2. Give a concise account of the structure and functions of the spleen.
3. What are the functions of the cerebellum ? Describe briefly the methods by which they have been investigated.

PHARMACOLOGY.

Examiners— { LT.-COL. B. H. DEARE, M.B., D.P.H.,
{ M.R.C.P., I.M.S.
{ DR. BIDHANCHANDRA RAY, B.A., M.D.,
{ F.R.C.S., M.R.C.P.

*Candidates are required to give their answers in their own words
as far as practicable.*

FIRST HALF.

1. Enumerate the " Anthracene Purgatives," giving the official preparations and doses of each variety.
2. Discuss the therapeutic uses of the Zinc Salts.
Or,
3. Enumerate the " Vegetable Bitters," and discuss briefly their pharmacological action and therapeutic uses.

Second Half.

1. What are Antispasmodics ? How do they act ? Give examples of each group.

2. Describe the action and uses of Apomorphine Hydrochloridum.

Or,

3. Give the official preparations and physiological action and uses of Silver Salts.

ORGANIC CHEMISTRY.

Examiners—
Rai Chunilal Basu, Bahadur, M.B., I.S.O., F.C.S.
R. N. Sen, Esq., M.A., M.Sc., F.C.S.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Question No. 1 and two others in each half to be answered.

First Half.

1. Describe the experiments by which you can show that *Urea* contains Nitrogen, Carbon and Hydrogen.   40

2. Starting with Carbon and Hydrogen, how would you prepare *ethyl alcohol* in the laboratory ? Give equations of the reactions that take place in the various stages of the process.   30

3. What is *phenol*, and how would you prepare it on a commercial scale ? Describe its properties, tests and uses.   30

4. State the general modes of formation and principal characters of the members belonging to the following groups of Organic Compounds :—   30

(a) *Aldehydes* ; (b) *Amines* ; (c) *Nitro-compounds.*

Second Half.

1. How would you detect and estimate Nitrogen in a food-stuff ? Name the nitrogenous constituents in the following : —   40

(a) *Milk* ; (b) *Wheat-flour* ; (c) *Pulses.*

2. Describe the preparation and purification of *Methyl Alcohol.* How would you distinguish methyl alcohol from ethyl alcohol ?   30

3. What are the chief sources of *glycerol*, and how is it obtained ? What products are formed (1) by heating glycerol; (2) by the action of strong Nitric Acid on glycerol ; (3) by heating glycerol with Oxalic Acid ?   30

4. Describe in detail the preparation of a pure sample of (1) *Caffeine* ; (2) *Strychnine.* Briefly state their characteristic properties and tests.   30

Final M.B. Examination.

November, 1918.

MEDICINE.

Examiner—Rai Upendranath Brahmachari, Bahadur,
M.A., M.D., Ph.D

First Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

First Paper.

1. What are Rigors or Chills ? Under what conditions do they occur ?
2. The deep cardiac dulness is increased transversely ; to what conditions might this be due, and how would you distinguish them ?

Second Half.

3. What is Influenza ? Mention its etiology, symptoms, complications, and diagnosis.
4. To what disease does the Filaria Bancroftii give rise ? Describe an attack of filarial fever. Give its diagnostic features.

Or,

5. Give the symptoms, signs and diagnosis of congenital hydrocephalus.

MEDICINE.

Second Paper.

*Candidates are required to give their answers in their own words
as far as practicable.*

First Half.

1. Give the symptoms, signs and diagnosis of acute miliary tuberculosis in a child.
2. What is Cholaemia ? Under what conditions is it met with ? Describe the symptoms ; from what other conditions has it to be distinguished ?

SECOND HALF.

3. Give the etiology, signs, symptoms and diagnosis of Pyelitis.
4. Give the symptoms, physical signs and diagnosis of an aneurism of the abdominal Aorta.

Or,

5. State all you know about Plumbism (Lead poisoning).

SURGERY.

Examiners— (DR. SURESPRASAD SARBADHIKARY, C.I.E., B.A.,
{ M.D.
(LT.-COL. C. R. STEVENS, M.D., F.R.C.S., I.M.S.

FIRST PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

'TWO *questions only to be answered.*

1. Describe the surgical conditions of which jaundice may be a   150 symptom.
2. Describe the signs, symptoms, diagnosis of cancer of the lower   150 lip, and its treatment.
3. Describe a case of adenoids of the naso pharynx, with special   150 reference to the more remote effects.

SECOND HALF.

4. Describe the surgical conditions in which blood-stained fluid   150 may be found in the peritoneal cavity.
5. Describe the signs, symptoms and progress of a case of tuber-   150 culous disease of the hip joint in a boy of ten. Describe the treatment.

·SURGERY.

SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

1. What are the conditions which necessitate the immediate   150
extirpation of the globe of the eye ?
2. Describe the modern treatment of syphilis in all its stages.   150

SECOND HALF.

Two questions only to be answered.

3. Describe the causes of painful defæcation, and the treatment.   150
4. Describe the pathology, symptoms, differential diagnosis and   150
treatment of a rodent ulcer.
5. Describe a case of talipes equino-varus in a child of 3 months,   150
and the treatment.

MIDWIFERY.

Examiners— { MAJOR H. B. STEIN, M.D., I.M.S.
               DR. KEDARNATH DAS, C.I.E., M.D.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

FIRST HALF.

1. Describe the character of the Liquor Amnii ? What are its   125
sources and uses ? Describe the diseases of the Amnion.
Or,
Describe the normal full-term placenta. Mention its abnormalities
and what are its functions.

2. What abnormal conditions may arise in micturition   125
     (*a*) in Pregnancy ;
     (*b*) during Labour ;
     (*c*) in the Puerperium ?
How would you treat them ?

SECOND HALF.

3. How will you diagnose a Face Presentation, the presenting　12
part being fixed and the membranes ruptured ? What is the prog-
nosis ? How will you manage the case ?

4. What do you understand by the term Cystocele ? How does　125
it arise ? What are its symptoms and treatment ?

PATHOLOGY.

*Candidates are required to give their answers in their own words
as far as practicable.*

Only FIVE *questions to be attempted.*

All questions carry equal marks.

PART I.

1. Describe the naked-eye appearances of the common forms of ulcera-
tion of the large intestine, and the microscopical characters in any two
of them.

2. Describe the organism of Syphilis, the methods of its recognition,
and its differentiation from other spirochetes which are likely to be con-
founded with it.

3. Describe the regeneration of (1) nerve tissue, (2) bony tissue,
(3) muscle tissue.

PART II.

4. State precisely the mode of origin of gall-stones, and briefly des-
cribe the character of the morbid lesions they produce.　　8　　　8

5. Describe and differentiate the changes in the blood in the various
forms of Primary Anæmia.

6. Describe the varieties of Sarcoma and note the position of the body
in which they are commonly found.

. HYGIENE.

Examiners— { DR. C. A. BENTLEY, M.B., D.P.H.
{ DR. TARAKNATH MAJUMDAR, L.M.S., D.P.H.

*Candidates are required to give their answers in their own words
as far as practicable.*

Equal value is attached to each question.

Two out of THREE questions to be answered from each half.

FIRST HALF.

1. Mention any diseases which are spread by the contamination of the soil by human fæces. Describe any one of these diseases which is prevalent in Bengal, and indicate the measures which should be taken for its prevention.

2. Describe any outbreak of cholera or enteric fever of which you have heard or have had personal experience; explain its origin and mention the measures which will prove effective in preventing such attacks.

3. Explain how you would determine whether a town or village was malarious or not. State clearly what are the measures which may be undertaken for the prevention of malaria, illustrating your answer if possible from facts which have come under your personal knowledge or observation.

SECOND HALF.

4. What are the principal epizootic diseases that are communicable to man? In what way are they communicated?

5. Sketch and describe the form of a water-closet you would recommend for (*a*) an ordinary household, (*b*) a large workshop.

6. What preventive measures should be taken by you to stamp out a local outbreak of small-pox in a small town?

MEDICAL JURISPRUDENCE.

Examiners— { MAJOR N. P. SINHA, M.B., M.R.C.P., I.M.S.
{ RAI LALBIHARI GANGULI, BAHADUR, M.B.

*Candidates are required to give their answers in their own words.
as far as practicable.*

The figures in the margin indicate full marks.

Only TWO questions to be answered from each half-paper.

FIRST HALF.

1. Describe fully what you understand by Rigor Mortis, Delusions,   100
and Paranoia.
How would you proceed to examine a case of Paranoia?

2. Describe fully the signs, symptoms and treatment of Snake   100
oisoning : also the post-mortem appearances.

3. How would you proceed to examine in a case of alleged Rape ?   100

SECOND HALF.

1. A man is said to have been murdered by strangulation with a   100
cord : What appearances would confirm the allegation ?

2. Are the following conditions of any real value in determining   100
the time of death in Bengal, and if so, how ?

  (a) Rigor Mortis,
  (b) Saponification,
  (c) Putrefaction,
  (d) Degree of digestion of Stomach contents.

3. What is Strychnine ?   100
Carefully distinguish strychnine poisoning from any disease that it
may resemble.

Does failure to detect the poison in the viscera absolutely negative
death from strychnine poisoning ? Briefly discuss the point.

𝔐.𝔇. 𝔈xamination.

1918.

1. Explain fully the various causes of death of the fœtus during labour. Discuss how various drugs administered to the mother may influence fœtal death.

2. Describe, in detail, the modifications which the ovum may undergo, due to the unequal development of uniovular twins

3. Pregnancy and Tuberculosis. Discuss the effect of one on the other. What are the problems in prophylactic consideration of pregnancy, complicated by tuberculosis ? What would be your treatment of pregnancy, labour and puerperium in the tuberculous ?

4. What do you understand by the term " contraction ring " ? What is the cause of it ? Give the prognosis and treatment.

You receive the following letter from a doctor :—

May, 8, 1918.

Dear Sir,

I am advising a lady here, a Mrs. X, to go to you for treatment and operation, if necessary.

She missed her March and April periods and on May 1st had a profuse discharge, almost a flooding, thin, watery, no clots. This lasted 12 hours and she felt much better. On May 7th again she had another flooding (apparently normal menstrual discharge) lasting 12 hours. In April about 12th she thought she might be pregnant, and I examined her and found the uterus enlarged and markedly retroverted. I rectified this but it fell over again, and on May 2nd I rectified it again and put in a fair-sized ring. After this the uterus was readily felt through the abdominal wall, well above the pubis. It felt irregular with a marked irregular projection above and to the right of the fundus. She had no pain, a very slight rise of temperature (for last 10 days) 99°4 F. or so. During the flooding, she had practically no pain, no feeling of bearing down, etc., beyond a slight tenderness now and again, such as she

normally has at menstrual periods. At present the uterus is felt three inches below umbilicus, inclined to be boggy, with hardness and irregularity on right side. Temperature is normal. No signs of pregnancy in breasts or otherwise, no tenderness, no softening of cervix, but signs of former erosion. The ring was removed on the 7th May before the flooding occurred.

She has had 2 children, the youngest 19 months of age.

The following is the history of the periods recently :—

December (1917). Normal.

January (1918). Normal, except rather less than usual.

February 10th. Normal, except less than usual.

March 6th. Missed.

April 3rd. Missed.

May 1st. Flooding.

A specialist examined her on May 7th and thought it might be an ovarian cyst complicating pregnancy.

Yours truly,

On her arrival on 12th May you examine and find her pale and delicate-looking. The abdominal tumour reaches almost to the level of the umbilicus. The breast signs of pregnancy are negative.

Bimanual examination reveals no tumour, distinct from the main mass which appears to be the uterus. Hegar's sign of Pregnancy is doubtful, but as the patient is suffering from a dark blood discharge your examination is necessarily very gentle. No fœtal heart sounds can be heard. A uterine souffle is heard.

Comment on this case. Discuss the bearing of the various observations on the diagnosis. Give your clinical diagnosis and the evidence for and against it.

ANATOMY, PHYSIOLOGY, EMBRYOLOGY AND PATHOLOGY IN RELATION TO OBSTETRICS AND GYNAECOLOGY.

Examiner—Lt.-Col. Sir Leonard Rogers, Kt., C.I.E., M.D., F.R.C.S , I.M.S.

All the questions carry equal marks.

Time allowed—4 hours.

1. Describe the anatomical and pathological conditions which predispose to extrauterine foetation.

2. Describe the naked-eye and microscopial characters of the tumours arising from embryological remains in the female genital organs, and indicate their mode of origin.

3. Discuss the diagnostic indications which may be derived from microscopial examinations of curettings of the uterine mucous membrane.

GYNAECOLOGY.

Examiner— { MAJOR H. B. STEIN, M.D., I.M.S.
{ DR. KEDARNATH DAS, C.I.E., M.D.

All the questions are to be answered.

The answers to the two halves are to be written in SEPARATE *books.*

Time allowed—4 hours.

FIRST HALF.

1. A married woman aged 47 states that she was delivered of a full-term male child 27 years ago. This was said to be her only pregnancy. The fact that she ever bore a child is denied.

You are asked (1) whether you could tell, by examination of the woman, if she had actually borne a full-term child ; and (2) if you could, to specify in detail each of the facts on which you rely.

Discuss the points in full.

2. In the treatment for " prolapse " of the uterus, the operation of vaginal hysterectomy has often been performed. Do you agree with the rationale of this operation for " prolapse " ? Discuss any points there may be in favour of or against this particular operation.

SECOND HALF.

3. Discuss the treatment of " Salpingitis," acute and chronic.

4. A Bengali patient aged 16 is brought to you for treatment as she never menstruated. How would you proceed to ascertain the possible causes which may have produced such a condition ?

𝔐.𝔇. 𝔈𝔵𝔞𝔪𝔦𝔫𝔞𝔱𝔦𝔬𝔫.

1918.

MEDICINE.

FIRST PAPER.

1. Discuss in detail the sensory and motor disturbances that may result from syphilitic lesions of the autonomic and sympathetic nervous systems.

2. Explain the symptoms of cerebellar abscess in the light of the pathological conditions associated with it.

3. Write a dissertation on (i) vascular troubles in later life, (ii) recent cardiographic observations in any *two* of the following :—

(a) Toxic Goitre, (b) Intraventrular heart block and Myocardial disease, (c) Mitral Stenosis in its various stages.

MEDICINE.

SECOND PAPER.

1. Give a minute and critical survey of the inoculation experiments and serological researches that have been made in leishmaniasis with special reference to their bearing on the diagnosis and immunity in the disease.

2. Discuss in detail the clinical and bacteriological features of the epidemic that is prevailing in Calcutta under the name of Influenza epidemic, embodying in your answer any conclusions that you may have arrived at from personal study.

3. Comment on the following case :—

Patient, a young man, was admitted into hospital with intense dyspnoea and stridoæ. He gave history of an attack of fever a few days previously attended with rigors and acute pain in the right side of his chest.

Physical examination of the chest revealed sucking in of the supraclavicular and substernal regions during inspiration. Laryngoscopic examination showed obliquity of the larynx and oedema of the cords. After a few days there was difficulty in swallowing food and the voice became somewhat dull but there was no distinct aphonia. There was visible collateral circulation over the upper thoracic region. The pupils were somewhat unequal. Blood examination showed slight leucocytosis. After some days' stay in hospital he was seized one night with violent cough followed by expectoration of a blood-stained material and marked amelioration of the symptoms. A few rales were now audible in the base of the left lungs with slight impairment of resonance in the same region. Urine showed presence of albumen with casts. On culture of the urine no growth was obtained. The fever diminished for a few days, but

it rose again and for some days there was inverse type of temperature. One night he complained of intense pain in the stomach and vomited about 1½ pints of brownish fluid and there was melaena. Subsequently delirium and stiffness of the neck set in. On Lumbar puncture about an ounce of clear fluid was removed with marked amelioration of the delirium for two days. Subsequently he began to suffer from fever of an intermittent nature coming on with rigors and assuming a tertian type on some days. The spleen was enlarged. A pystolic bruit was audible at the apex of the heart. In a few days the patient passed into a typhoid state and died. Blood culture gave negative results.

Other special examinations—ophthalmoscopic examination nothing characteristic. Von Pirqeet's tuberculin-test indefinite. Widal reaction for typhoid—partial 1 in 20.

PATHOLOGY.

The questions all carry equal marks.

1. Discuss the relationship of local and general oedema to pathological lesions affecting the veins and lymphatics respectively.

2. Describe the naked eye and microscopical characters of syphilitic lesions of the brain.

3. Describe the exact part played by insects in the transmission of—
   1. Plague.
   2. Typhus fever.

MENTAL DISEASES.

1. Discuss the recent concepts of the neuroses. Write what you know about war neuroses. Criticise the recent ideas about ' erogenous zones' and their bearing on the neuroses.

2. Write what you know about mental disorders associated with pathological changes in the sexual and endocrine glands, and in diseases due to abnormalities in the secretion of the latter. Also discuss aphasia in relation to mental disease.

3. Write a dissertation on the psychosis of prisoners.

𝕸.𝕷. 𝕰xamination.

1918.

HINDU LAW.

Candidates are required to give their answers in their own words as far as practicable.

Candidates are required to answer ANY FIVE *questions.*

All the questions are of equal value.

1. What are the principal titles of law or topics of litigation according to Manu; and what was the Constitution of a Court of Justice according to Manu and Yajnavalkya ?

State the provisions contained in the Institutes of Manu with respect to the following matters :—

(i) Limitation ; (ii) Interest on money lent ; (iii) Void Contracts ; (iv) Right of private defence.

2. Discuss the principles upon which the order of succession is worked out in the Mitakshara and the Dayabhaga.

What is the difference in the meaning of the terms ' Sapinda,' ' Daya ' and 'Partition' as used in the Mitakshara, and the Dayabhaga ?

3. How is the doctrine of self-acquisition by a member of a joint Hindu family stated by Yajnavalkya ?

Discuss the rights of a member of a joint Hindu family to properties acquired by him after having been educated at the family expense, with illustrations from decided cases.

4. State the order of succession to the Stridhan property of a maiden, and the text upon which it is founded.

A maiden dies leaving a sister's son and a father's brother's son. Who is the preferable heir ? State your reasons.

Discuss briefly the half-brother's position in the order of succession to Stridhan property according to the Bengal and Benares Schools.

5. Discuss the proposition " under the Hindu Law clear proof of usage will outweigh the written text of the law," with reference to family customs, local customs and immoral customs. .

6. State the texts of Vasistha and Katyayana relating to the share which an adopted son is entitled to get when a son is born to the adopter after the adoption.   What conclusions have been drawn therefrom as to the shares of the adopted son and the after-born son by different commentators ?

7. Discuss the liability of a son in a Mitakshara joint family for the debts of his father charged upon ancestral property, with illustrations from leading cases on the point.

8. Describe the nature of an impartible estate. Can such an estate belong to a joint family governed by the Mitakshara ?

Discuss the law relating to alienation of an impartible estate, and its liability for the debts of the deceased holder in the hands of the successor.

9. Discuss the powers of a trustee of a religious endowment under the Hindu Law as regards management and alienation of the trust property.

What are the rules governing the devolution of the trust on the death of a trustee ?

10. Write a short essay on the power of testamentary disposition in Hindu Law.

JURISPRUDENCE.

Examiner—DR. S. C. BAGCHI, B.A., LL.B.. LL.D.

The same value is attached to each question.

Only THREE *questions are to be attempted.*

1. " Law is not a museum of art, but a representation of life." – *Saleilles.* Discuss the bearing of this remark on the relation of Jurisprudence to Sociology.

2. " Law is a group of precepts recognized by all the members of society as necessary for regulating their mutual intercourse and maintained by the social power by way of a sanction."—*Gaston May.* How far is this definition of Law compatible with any other definition of Law familiar to you ?

3. Give some account of the Reception of Roman Law in Germany at the end of the 14th century. How did the administration of justice under the Teutonic folklaws differ from the system now obtaining in Germany ?

4. Discuss shortly the important modern theories of criminal liability. Can you suggest any improvement on any part of the Indian Penal Code ?

5. It has been remarked by an eminent jurist that the codification of the private law into a Civil Code is the most difficult task for a legislator. Why ? Give an instance where such a codification has well nigh been a failure.

6. Write an Essay on one of the following :—

    (a) Science and technics in private law.

    (b) The irreducible " droit naturel."

    (c) " Grau, theurer, Freund, ist alle Theorie.
        Und grün des Lebens goldner Baum."—*Goethe.*

[Gray, my dear friend, is all theory, and green life's golden tree.] How far does this apply to Jurisprudence ?

ROMAN LAW.

Examiner—HON'BLE SIR ASUTOSH MOOKERJEE, KT., C.S.I., M.A., D.L., D.SC., PH.D.

Candidates are required to give their answers in their own words as far as practicable, and are permitted to attempt FIVE *questions only.*

1. Explain the provisions in the Twelve Tables relative to the acquisition of ownership by Usucapio. Explain the application of these provisions in the development of Roman Law.

2. At what periods and in what respects may Christianity be regarded as having influence on the development of the Roman Law up till the death of Justinian ?

3. (*a*) "Gaius' subject does not in the least resemble the Law of Persons as conceived by Austin."
(*b*) "The first book of the Institutes of Justinian following Gaius, treats of the law relative to status or conditions under the name *de jure personarum*." Discuss these statements.

4. Give a brief historical survey of Roman Municipal Legislation.

5. In what Roman transactions were witnesses required by Law ? What do you consider to have been (1) the function of these witnesses. (2) the reasons for requiring witnesses in these cases and not in others ?

6. On what principles would you determine whether, of two articles united, one was an accessory, for the purpose of the law of Accessio ?
A, heir to an Artificer, finds in the warehouse an ivory casket of costly materials which he thinks to be his as heir, but which belong in fact to different customers. He repairs the casket with the materials. What is the resulting legal position, as to property and rights of compensation ?

7. "The *Fidei commissarius heres* became a true universal successor, and therefore, like the bonorum possessor, to all intents and purposes an heir. This result, however, was not finally attained until the time of Justinian." Give an historical account of the means whereby this result was attained.

8. "The procedure by Sponsion must be regarded as the bridge between the sacramental process and the petitory vindication." Explain.

9. Outline the history of (1) the form, (2) the content, of Stipulatio.

10. Describe the elements of permanent value in judicial procedure which we owe to the Romans.

PRIVATE INTERNATIONAL LAW.

Examiner—A. E. BROWN, ESQ., M.A., LL.B.

Candidates to attempt only SIX *questions, of which three must be taken from Section A and three from Section B. Wherever necessary they are expected to quote, critically analyse and carefully differentiate ruling cases.*

SECTION A.

1. The X Company is registered and carries on business in Natal. In 1916 the Y Bank, which is domiciled in Natal, takes from it a debenture for £20,000, and the payment of the debenture is made a first charge

on the uncalled capital of the company. No notice of this is given to the shareholders. In 1917 the Z Company, which is Scotch by registration and business, sues the X Company in Scotland. At the same time it issues a Scotch process called "arrestment" against numerous shareholders of the X Company who are resident in Scotland, the effect of which is that the calls payable by them to the X Company are arrested and the Z Company becomes a secured creditor on the funds so arrested for the damages it may subsequently establish its claim to in the action. The Z Company obtains damages in a Scotch Court, but before it realises anything the X Company is wound up. By the law of Natal the Y Bank has priority over all other creditors in respect of the uncalled capital, but by Scotch law the Z Company has priority with regard to calls on the Scotch shareholders because the shareholders had had no notice of the charge effected by the debenture in favour of the Y Bank.

Discuss this case.

2. *M*, a domiciled subject of Portugal, is employed in travelling over Europe as an agent for a Portuguese firm. He marries in Spain *P*, an Englishwoman, and subsequently takes a house for her in England so that she may reside there during his absences on business. He never resides in England himself. *P* submits a petition to an English court for judicial separation on the ground of cruelty committed by *M* in Portugal.

Discuss the question of the court's jurisdiction.

3. *X* and *Y* are both domiciled and resident in England. In 1912 *X* gives *Y* in London an equitable charge on his landed property in British Columbia to secure various advances made by *Y*, and he agrees to execute a legal mortgage. By the *lex situs* the land in question is not legally affected by the equitable charge and *X* never executes the legal mortgage. *X* dies insolvent and *Y* asks *Z*, who is *X*'s legal personal representative, to execute a mortgage which will be valid by the *lex situs*.

Advise Z as to whether an English court will compel him to do this.

4. *A*, a domiciled Englishman, contracts a debt in England to *X*, a domiciled Mexican. *X* dies leaving property both in Mexico and England. *Y* takes out a grant of administration in England and *Z* is given an equivalent position in Mexico. *A* is travelling in Mexico at this time and Z demands payment of the debt, threatening legal proceedings in default of payment. *A* pays, but on his return to England *Y* demands payment.

Advise *A*.

5. *A*, a domiciled Englishman, by a will made in England leaves a legacy to "the next of kin" of *B*, a domiciled Roumanian. *B* has a half-sister *C* and a nephew *D*, the son of a dead sister of the whole blood. *C* however is illegitimate by English law although legitimate by Roumanian. In English law the half blood of a nearer degree. But in Roumanian law the more remote whole blood exclude the nearer half blood.

State your opinion as to who is the rightful claimant to the legacy.

6. In 1895 *A*, who is a British subject by birth with a domicil of origin in England, takes up his permanent residence in Egypt. In 1905 he marries *B*, an Egyptian Christian at Alexandria, according to the rites of the Orthodox Church. In 1910 he describes himself in his will as "a merchant, a British-born subject, having a domicil in Egypt." In 1914 Egypt ceases to be under the suzerainty of Turkey and becomes a British Protectorate. In 1917 *B* consults you as to whether she can bring a petition for a divorce from *A* in an English court. Advise her.

Section B.

7. " We have an English lawgiver fixing the 'age (of majority) at twenty-one and adhering to the old view that his authority over personal status depends on the English domicil of the persons to be affected, and an Italian lawgiver fixing the age at nineteen and adopting the new view that his authority over personal status depends on the Italian nationality of the persons to be affected. If one who is politically an Englishman is domiciled in Italy and makes his will and dies there at the age of twenty, neither the English nor the Italian lawgiver has claimed authority to determine his majority. What, then, shall be done ?

An English judge . . . seized of the affair will understand that the conflict of rules of private international law has had for its consequence that they lead to no result in the case before him. He will be thrown back upon an examination of the meaning of principle of domicil. He will find that that principle is the expression of the view that the world is divided for purposes of private law into civil societies based on domicil . . . . . He will further find that the law of Italy amounts to saying that no civil society based on domicil exists in that country, and he will finally consider that domicil is eliminated from the case and that there is no reason for holding the political Englishman to have attained his majority sooner than he would have attained it in his own country." [*Westlake*].

Comment from the point of view of other possible opinions and a critical examination of decided cases.

8. " In divorce proceedings the jurisdiction of the court is very different in the two cases of the suit against the consort and the suit against the co-respondent." [*Baty*]. Comment.

9. The essential validity of a contract is to be tested in the main by the law of the place of performance [*lex loci solutionis*] though it may occasionally depend also upon the law of the place where the contract is made (*lex loci celebrationis*): in any case it does not depend upon the intention of the parties." Dicey. quoting the above theory, says : -- " The theory is it is submitted inconsistent with recent decisions of English courts." Comment.

10. " This company I think may properly be deemed both Scotch and English. It may for the purposes of jurisdiction be deemed to have two domicils." (*From dissenting judgment of Lord St. Leonards in* Carron Iron Co. *v.* Maclaren).

State your opinion as to the support given to this view, of the possibility of a company having two domicils, by decided cases.

11. Write notes on the contributions of any *two* of the following to the theory of Private International Law :—

(*a*) Bartolus, (*b*) d'Argentre, (*e*) Savigny.

12. Westlake writing in 1858 says :—" The English law must on principle be taken as excluding in the case of transactions having their seat here not only a foreign age of majority but also all foreign determinations of status or capacity, whether made by law or by judicial act."

Discuss the extent (if any) to which this principle has since been modified by judicial decisions.

EQUITY.

Examiner—HON'BLE DR. TEJ BAHADUR SAPRU, M.A., LL.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

*Only FIVE questions should be answered. In these five you
are requested to include No. 2 and No. 4.*

1. Write a historical note on the origin of the office of the Chan-   20
cellor and the development of his jurisdiction.

2. Show that the history of the rule relating to precatory trusts   20
has been similar to that of the Roman *fidei commissa*, and discuss the
present condition of the Law with special reference to the cases of
Mussoorie Bank v. *Raynor* and *Conisky* v. *Bowring-Hanbury*.

3. (*a*) ' A mere agreement between *A* and *B* that *B* shall pay *C*   10
(who is no party to it directly or indirectly) will not prevent *A* and
B from coming to a new agreement the next day releasing the old
one '—per Jessel M.R. Discuss this with special reference to cases in
which an attempt is made to read a trust in favour of strangers to an
agreement. Refer to leading English and Indian cases on the subject.

(*b*) A solicitor who was the trustee of a fund fraudulently mis-   10
appropriated it and with it bought an estate which he then conveyed
to a relative. The relative then mortgaged the property, the solicitor
trustee acting in the course of the mortgage transaction as the com-
mon solicitor for mortgagor and mortgagee. The beneficiaries
claimed to follow their trust-money into the property which had
been bought with it and urged that notice must be imputed to the
mortgagee as the solicitor knew of the breach of trust. Discuss the
nature and limits of the equity existing in the case, if at all, between
the beneficiaries and the mortgagee

4. (*a*) " Upon the whole, equity never attempts to compel strict   10
performance of affirmative contracts, but contents itself with com-
pelling reparation for breaches of them."

(*b*) " Equity takes its stand in effect upon the construction of   10
Justinian, by giving the Executor his choice between accounting for
the testator's personal estate on the one hand and paying the
testator's debts out of his own pocket, on the other."

Develop these propositions of Professor Langdell, and explain and
illustrate them.

5. " The better view seems to be that want of mutuality to be   20
fatal to a claim for specific performance must exist at the time the
action is brought." Discuss and criticise this statement, explaining
the nature and the limits of the rule of mutuality.

6. (*a*) Explain the doctrine of Part-performance and refer to any   10
leading English and Indian cases that you know.

(*b*) Will the doctrine of Part-performance apply to 'a document   10
embodying a family arrangement which is unregistered but which
should have been registered ?

7. " It has sometimes been made a question whether Courts of   20
Equity have authority to stay proceedings in the Courts of foreign
countries " (*Story*). Discuss this question, indicating clearly the
limits of the Jurisdiction of Courts of Equity. Refer to leading
authorities.

8. Subject to what conditions will a Court of Equity restrain   20
(*a*) the publication of libellous matter and (*b*) the publication of private literary letters ?

9. State briefly the leading facts of any two of the following cases,   20
and also explain the rule of law for which each one of those two cases
is an authority :—

     (*a*) *Stapilton* v. *Stapilton.*
     (*b*) *Chesterfield* v. *Janssen.*
     (*c*) *Dering* v. *Earl of Winchelsea.*   "
     (*d*) *Speight* v. *Gaunt.*
     (*e*) *Ackroyd* v. *Smithson.*
     (*f*) *Attorney-General* v. *The Ironmongers Company.*

LAW RELATING TO THE TRANSFER OF IMMOVABLE PROPERTY AND LAW OF PRESCRIPTION.

Examiner—HON'BLE SIR ASUTOSH MOOKERJEE, KT., C.S.I., M.A., D.L., PH.D.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Of the fifteen following questions which carry equal marks, only FIVE
are required to be answered, namely, one from each of the five groups,
A, B, C, D and E.

GROUP A.

1. (*a*) Set forth under methodically arranged heads the substance   20
of the general provisions in Chapter II of the Transfer of Property
Act limiting the power of the transferor to restrict the mode of
enjoyment of, and to create successive vested or contingent interests
in, the property transferred ; and refer to any cases you remember,
to show that most of the provisions of Chapter II only declare as law
what had been followed before as principles of justice, equity, and
good conscience.

(*b*) Write short notes on the doctrines of Election, Apportionment,
and *Lis pendens.*

7. (*a*) A British poet has pathetically sung—   20

       "The toils of law what dark insidious men
       Have cumbrous added to perplex the truth,
       And lengthen simple justice into trade,
       How glorious were the day that saw these broke."

Discuss how far this poetic indictment is just as against the niceties
of the law of constructive notice, and how far the Conveyancing Act
of 1882 in England, and the Transfer of Property Act in India, can,
be said to have brought on the poet's 'glorious' day.

(*b*) Give any classification you consider convenient, if not strictly
logical, of the different descriptions of cases of constructive notice,
placing under proper heads the cases of *Jones* v. *Smith*, *Kennedy* v.
Green, *Agra Bank* v. *Barry*, and *Mohori* v. *Dharmdas.*

3. (*a*) Compare the provisions of the English law relating to **20** Fraudulent Conveyances under the Elizabethan Statutes and the Voluntary Conveyances Act of 1893, with those of Section 53 of the Transfer of Property Act relating to Fraudulent Transfers.

(*b*) *A*, after having in answer to an application by his creditor *B* said in court that he did not intend to transfer any of his properties, transferred some of his properties for valuable consideration to *C*, and some other properties without consideration on the same day to *D*. *B* subsequently obtained a decree against *A*.

Were the transfer to *C* and *D* valid or void as against *B* ? State fully the reasons for your answer.

Group B.

4. (*a*) Speaking of codification in India, Macaulay said, " Our **20** principle is simply this—uniformity, when you can have it, diversity, you must have it, but in all cases, certainty."

Discuss how far the Transfer of Property Act has succeeded or failed to satisfy that principle by securing certainty in the provisions relating to forms and formalities for sale of immovable property in Section 54.

(*b*) How would you modify Section 54 or the Interpretation clause of the Act to remove the uncertainty that exists ?

5. Discuss the law relating to covenant for title and for quiet **20** enjoyment, with special reference to the following points, namely,

    (i) when is the right to sue on the covenant acquired ?

    (ii) how may the right be lost ? and,

    (iii) what are the remedies for breach of the covenant ?

6. (*a*) State the law relating to the seller's charge for unpaid **20** purchase money as enacted by the Transfer of Property Act, and compare it with the English law relating to the vendor's lien for unpaid purchase money.

(*b*) When is the charge or lien acquired, how and against whom may it be enforced, and how is it lost ?

Group C.

7. (*a*) Describe the different kinds of mortgage provided for in **20** the Transfer of Property Act, pointing out their distinction from one another.

(*b*) Explain fully how you would distinguish a mortgage by conditional sale from a sale with a condition for re-purchase, and a usufructuary mortgage from a lease.

8. (*a*) Discuss the origin and development of the mortgagor's **20** right of redemption in England and in India, referring in their proper places to the cases of *Vernon* v. *Bethill, Seton* v. *Slade, Pattabheramiar* v. *Naikim,* and *Thumbusawmy* v. *Hossain.*

(*b*) Formulate what may be called the rule against clogging redemption. Does it preclude purchase of the equity of redemption by the mortgagee ?

9. Discuss fully the principles of Marshalling and Contribution. **20**

Group D.

10. (*a*) Distinguish an Easement from a Natural Right and a **20** Licence.

(b) Discuss the questions (i) whether it is essential that an ease-
ment must be beneficial to the occupation of the dominant tenement,
and (ii) whether there can be an easement for the benefit of the ser-
vient tenement.

11.   (a) State the modes of acquisition of an easement, and give   20
the reason why the presumption of a grant is considered necessary
for the origin of an easement.

(b) Discuss the question whether grant of reservation of an ease-
ment may be presumed on the severance of tenements, commenting
on *Pycr* v. *Carter*, and *Suffield* v. *Brown*.

12.   (a) Discuss the nature of the right to the support for build-   20
ings from adjacent land.

(b) What are the rights and remedies of a resident riparian pro-
prietor of land on the bank of the Hughli, to prevent pollution of
the water of the river by mill-owners and others carrying on lawful
trades ?

GROUP E.

13.   Write an essay on " The Classification of Property and its   20
significance in English and in Indian law."

14.   Write an essay on " The Benami System of holding Property   20
in India."

15.   Write an essay on " The Ethical Foundation of the Law of   20
Easements."

LAW RELATING TO WILLS.

Examiner—SIR B. C. MITTER, KT., *Bar.-at-Law.*

*Candidates are required to give their answers in their own words
as far as practicable.*

*All answers must be supported by reasons and citation of
authorities.*

The questions are of equal value.

*Candidates are required to answer Questions 5 and 6 or 7,
and any three other questions.*

1.   (a) Will is said " to speak from the death of the testator." Dis-
cuss this statement fully, pointing out its limitation. How does this rule
apply to powers of appointment, general and special, vested in the
testator ?

(b) Testator states : " I bequeath *my new* 3¼ p.c. stocks to *A*." Testa-
tor had 50 such stocks at the time of the execution of the will. He after-
wards acquires 50 more of such stocks. Discuss what stocks pass under
the above bequest.

(c) Does a general devise " to *A* his heirs and assigns to and for his
and their own use and benefit " pass trust and mortgage estates ?

2.   (a) Has the word " money " in a will ever been held to comprise
the whole residuary personal estate of the testator including his furniture,
horses, carriages and articles of like nature ?

(b) Testator bequeaths all his " ready money " to *A*. Does *A* get (1) cash standing to the credit of the testator at his banks, (2) money kept in deposit with his bankers repayable on a week's notice ?

(c) Testator bequeaths all his "cash money " to *A*. Does *A* get rents, bond debts and mortgage debts due to the testator at the time of his death ? ·

(d) Does the bequest of the testator's " money " or monies *prima facie* include (1) stock in the public funds, (2) money on deposit account with the bankers ? .

3. Are trusts for accumulation of income valid under (a) English Law, (b) Hindu Law ?

Discuss 3(a) briefly but 3(b) fully.

4. What is meant by a gift to " a class " ?

A Hindu testator before the year 1915 executes a will and makes a bequest of an estate for life to his son and the remainder to his grandsons, some of whom are born before his death, and others are born during his son's lifetime but after his death.   Discuss which of the grandsons will take the estate in remainder.

N.B.—*The candidate is requested to refer fully to the Indian authorities bearing on this question.*

5. (a) What powers and obligations have an executor to carry on the business of the testator ?

(b) What are the rights of the creditors of the business carried on by the executor against (1) the executor and the estate of the testator ?   (2) In what way are such rights to be enforced against the estate of the testator ?   (3) Can such creditors prove their debts in an administrative action, against the estate of the testator, instituted by the testator's creditors ?

-   (c) Discuss—

(1) *Dowse* v. *Girton*.

(2) *Farhall* v. *Farhall* : and other cases of the above types.

6. Discuss the effect of revocation of Probate and Letters of Administration on the rights of persons who have dealt with such executors and administrators in good faith before revocation.

7. (a) Discuss the rule in " Wild's Case."

(b) What effect has the passing of the preliminary decree in an administrative action instituted by creditors on the powers of executors and administrators ?

8. Discuss the principal Indian cases on the subject of executory devises both before and after the passing of the Hindu Wills Act, and state briefly the present Hindu Law on this subject.

9. Discuss the subject of " conditions subsequent " attached to a bequest with special reference to (a) conditions not to dispute the will, (b) conditions in restraint of marriage, (c) conditions of residence, (d) conditions as to names and arms clauses.

10. (a) Discuss the nature of interests liable to be affected by the rule against perpetuities, mentioning those which are not so affected.

(b) Does it apply to personal contracts, restrictive covenants and renewals of leases ?

 ·   (c) Is the rule against perpetuities recognised by the Mahomedan or Hindu Law, and if so to what extent ?

REAL AND PERSONAL PROPERTY.

Examiner—HON'BLE MR. JUSTICE W. E. GREAVES, M.A.

Not more than FIVE *questions are to be answered, three of which must be from Part I and two of which must be from Part II.*

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

PART I.

1. What different kinds of Estates Tail are there ? Give exam-   20
ples. How can an Estate Tail be put an end to at the present time,
and by whom can this be done ? What do you mean by a Base Fee ?

2. (*a*) " Every contingent remainder of an estate of Freehold   20
must have a particular estate of Freehold to support it."

Explain what is meant by a Contingent Remainder , giving an
example ; and also give an example of a contingent remainder which
is bad as not being in accordance with the above rule. What was
the origin of the rule ?

(*b*) " Every contingent remainder must vest during " the continu-
ance of the particular estate which supports it."

Illustrate this by an example. Can you prevent the operation of
this rule upon the failure of the particular estate which supports the
contingent remainder, and if so how ?

3. What is the rule against perpetuities ? Illustrate the rule by   20
examples of cases which conform to it and which contravene it.

What is the law with regard to accumulations ?

4. What is the Statute of Uses ? Discuss its effect, and show   20
how the object for which it was enacted was defeated. How is it
now utilised in modern conveyancing ?

5. John Brown has an estate in fee simple in Blackacre worth 20   20
lacs and also 20 lacs invested in War Loan and a large amount of
valuable Silver Plate and Pictures. He has a wife and three sons
and two daughters. He wants to settle Blackacre so as to keep it in
his family but he wants to provide thereout an annuity of Rs. 12,000
for his widow. How does he do all this ? He wants to make the
Silver Plate and Pictures descend as heirlooms with Blackacre. Can
he do this, and if so to what extent.? He wants to leave the 20 lacs
of War Loan amongst all his children equally, and after their respec-
tive deaths he wants their shares to go to their children as his sons
and daughters wish. How can he do this ? Sketch out a form of
settlement to carry all this into effect.

PART II.

1. What are the various steps necessary under English Bank-   20
ruptcy Law before a man can be adjudicated a Bankrupt ? What
are the effects of such steps upon the debtor's property and his
powers of disposition over it ?

2. Explain the following expressions, giving examples to illustrate your answers :—

(1) Bailment, (2) The executor's right to prefer and his right to retain, (3) Mobilia sequuntur personam, (4) chose in action, what different kinds are there ? (5) negotiable instruments, (6) Bill of Exchange.

3. (a) How do you form a Joint Stock Company under the English 20
Companies Acts ?

(b) Explain how such a company can be wound up. What are the three kinds of winding up, and when are they employed ?

(c) Explain—(1) Floating Charge, (2) Reduction of Capital and how it is effected, (3) Ultra vires of the Company, (4) Special Resolution, (5) Memorandum of Association and what it contains, (6) Private Company.

4. Explain the following expressions :— , 20

(1) Once a mortgage always a mortagage, (2) Tacking, (3) Consolidation, (4) Marshalling, (5) Clog on the equity of redemption.

EVIDENCE.

Examiner—DR. J. C. WEIRE, B.A., LL.D.

*Candidates are required to give their answers in their own words
as far as practicable.*

The figures in the margin indicate full marks.

1. "Hearsay, then, is admissible when it is part of the transac- 20
tion of the *res gestae*. The question is, not whether what was said is
true, but whether it was *said*" (*Phillimore*). Define the meaning of
the term " hearsay " and discuss the question whether a statement
forming part of the *res gestae* is ever admissible as proof of the facts
asserted in the statement. Is there any provision in the Indian Evi-
dence Act which renders this question less important in India than
in England ?

2. (a) Describe the service rendered by Lord Mansfield in develop- 15
ing the law of evidence in England.

Or,

(b) Discuss the fairness of Phillimore's attack on the Judges of
the Courts of Common Law in England.

Or,

(c) Describe the mode of controlling the jury and correcting
their errors under early English Law, and point out its defects.

3. (a) " The burden of proof and the weight of evidence are two 20
very different things." Explain and illustrate this proposition.

Or,

(b) " Discuss the question how far declarations of a testator are
admissible on questions concerning the validity or the interpretation
of his Will.

4. (a) Illustrate " the infirmative hypotheses affecting real evi- 15
dence " (*Best*).

Or,

(*b*) Write a note on any one of the following presumptions:—
The presumption of death after seven years' absence: the presumption in favour of innocence: the presumption in disfavour of a spoliator.

5. (*a*) Examine the " probative value of similar offences or acts"   15
(i e. similar to that which is the subject of a criminal charge) when
" offered for the purpose of showing knowledge, intent or design " on
the part of the accused (*Wigmore*).

                              Or,

(*b*) Contrast the values of " self-contradiction " and contradiction
by other witnesses for the purpose of discrediting a witness.

                              Or,

(*c*) Point out the weakness in the prosecution's case either in (i)
John Donellan's Case or in (ii) the Durrant Case.

6. (*a*) Discuss the question whether an accused ought to be allowed   15
to give evidence on his own behalf; and, if so, whether he ought to
be treated in all respects like an ordinary witness.

                              Or,

(*b*) Examine the reasons usually assigned for the rule that a
party may not discredit his own witness by attacking the latter's
character.   *Or,*

(*c*) Discuss the arguments for and against the rule in *Regina* v.
Rowton (where a witness, a former pupil of the accused, who was
called to give evidence to rebut evidence of the accused's good character, stated that, when a boy he had known the accused and that
in the opinion of the witness and of the witness' brothers the accused
was a man " capable of the grossest indecency and the most flagrant
immorality "; and this evidence was declared inadmissible).